



DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT, CORPS OF ENGINEERS
P.O. BOX 17300
FORT WORTH, TX 76102-0300

June 6, 2024

**REQUEST FOR STATEMENT OF INTEREST
W9126G-24-2-SOI-3302**

Applicants must be a member in one of the following Cooperative Ecosystem Studies Units Regions: Californian/Colorado Plateau

Project Title: *Natural Resources Support – Travis AFB, CA*

A cooperative agreement is being offered ONLY to members of the Cooperative Ecosystem Studies Units (CESU) Program Region(s) identified above. Award will be made upon mutual agreement and acceptance of the terms and conditions contained in the request for proposal and the of the recipient's CESU Master Agreement. Note the established CESU Program indirect rate is 17.5%.

Responses to this Request for Statements of Interest will be used to identify potential organizations for this project. Approximately **\$668,572.00** is expected to be available to support this project for the **base period**. Additional funding may be available to the successful recipient for optional tasks and/or follow on work in subsequent years.

NOTE: This project will be awarded under the authority of 10 USC 670c-1, **Sikes Act**: For projects for the implementation and enforcement of integrated natural resources management plans, priority shall be given to award to Federal and State agencies having responsibility for the conservation or management of fish or wildlife.

Period of Performance. The base period of agreement will extend 18 months from date of award. There may be up to four (4) 18-month follow-on periods based on availability of funding.

Description of Anticipated Work: See attached Statement of Objectives

NOTE: At this time we are only requesting that you demonstrate available qualifications and capability for performing similar or same type of work by submitting a Statement of Interest. A full proposal and budget are NOT requested at this time.

Preparation of your Statement of Interest: Provide the following (Maximum length: 2 pages, single-spaced, 12 pt. font):

1. Name, Organization, Cage Code, Unique Entity ID, and Contact Information (Email)
2. Brief Statement of Qualifications (including):
 - a. Biographical sketch of the Principal Investigator, to include specific experience and capabilities in areas related to this project's requirements
 - b. Relevant past projects and clients with brief descriptions of these projects

- c. Staff, faculty or students available to work on this project and their areas of expertise
- d. Brief description of other capabilities to successfully complete the project: (e.g. equipment, laboratory facilities, greenhouse facilities, field facilities, etc.)

Submission of Your Statement of Interest

- 1. Statements of Interest are due by 2:00 P.M., Central Time, on **8 July 2024**.
- 2. Submit your Statement of Interest via e-mail attachments or direct questions to:

Nicholas Aprea
Grants Specialist
USACE, Fort Worth District
Email: Nicholas.a.aprea@usace.army.mil
Office: (817) 886-1925

David Leptien
Project Manager
USACE, Fort Worth District
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Review of Statements Received: All statements of interest received from a member of the CESU Region(s) identified above will be evaluated by a board comprised of one or more people at the receiving installation or activity, who will determine which statement(s) best meet the program objectives: offer the most highly qualified Principal Investigator, have the most relevant experience and the highest capability to successfully meet the program objectives. Submitters whose statements are determined to best meet the program objectives will be invited to submit a full proposal.

Timeline for Review of Statements of Interest: RSOI's are required to be posted on www.Grants.gov for 30 days prior to the Government making a decision and requesting full proposals.

Thank you for your interest in our Cooperative Agreements Program.

Paige E. Poorman

Paige E. Poorman
Contracting Officer

Attachment: Statement of Objectives

STATEMENT OF OBJECTIVES
for
NATURAL RESOURCES MANAGEMENT ACTIVITIES
for
NATURAL RESOURCES PROGRAMS
at
TRAVIS AIR FORCE BASE,
CALIFORNIA

Cooperative Ecosystems Studies Unit (CESU) Cooperative Agreement
14MAY2024

1.0 PURPOSE

1.1 The Travis Air Force Base (Travis AFB) environmental programs ensure military mission activities are conducted in compliance with all applicable environmental laws, regulations and policies with cooperation and assistance from the Air Force Civil Engineer Center's (AFCEC) Travis Installation Support Section (ISS). Article I B of the master agreement states the objectives of the CESU are to: provide research, technical assistance and education to federal land management, environmental and research agencies and their potential partners; develop a program of research, technical assistance and education that involves the biological, physical, social sciences needed to address resource issues and interdisciplinary problem-solving at multiple scales and in an ecosystem context at the local, regional, and national level; and place special emphasis on the working collaboration among federal agencies and universities and their related partner institutions.

1.2 This work requires full-time onsite support person(s) located at Travis AFB. This work also requires off-site support for less than full-time projects that are seasonal in nature and require limited fieldwork at Travis AFB and the bases' other geographically separated units (GSUs). The work shall involve activities associated with natural resources, such as field surveys, reporting, coordination, document reviews, travel to and from Travis AFB and GSUs for off-site personnel, attendance at meetings, project management, and GIS data management.

2.0 AUTHORITY

Authority to enter into a Cooperative Agreements (CA) for the work: Section 670c-1, Title 16 United States Code, Sikes Act.

2.1 In agreement with the above stated goals, the recipient/cooperator agrees to provide the necessary personnel, equipment, and materials required to implement, in part, the Travis AFB responsibilities pursuant to the Endangered Species Act (16 USC 1531 et seq.), the Sikes Act Improvement Act, the

Migratory Bird Treaty Act (16 USC 1361 et seq.), the National Environmental Policy Act (42 U.S.C. 4321 et seq.), and applicable implementing regulations, such as Air Force Manual (AFMAN) 32-7003.

2.2 In accordance with section 6305 – *Using cooperative agreements* of the *Federal Grant and Cooperative Agreements Act of 1977* (31 U.S.C. § 6301 et seq.), all CESU projects must carry out a public purpose of support or stimulation, instead of acquiring goods or services for the exclusive direct benefit of the United States Government. Examples of carrying out a public purpose may include, but are not limited to, the following:

- Project results are made available to a wide audience (including nonfederal entities, NFE)
- Project results/outputs add to the scientific literature/knowledge base, with applicability and utility beyond the scope of the project footprint/study area.
- Academic and other nonfederal partner institutions (and their personnel) gain professional experience, increase knowledge, and develop skills and abilities.
- Students benefit from direct interaction with federal scientists, program and technical staff, and field unit managers.

2.3 In accordance with section 6305 – *Using cooperative agreements* of the *Federal Grant and Cooperative Agreements Act of 1977* (31 U.S.C. § 6301 et seq.), substantial involvement is expected between the Department of Defense and the recipient when carrying out the activity contemplated by the cooperative agreement. The DoD agrees to participate at a national level in support of the CESU program as accepted in the Master MOU for the establishment and continuation of the CESU program Article II 1-4 and Article VI 1-7.

The installation further (hence DoD) agrees to provide substantial involvement as directed under the appropriate master agreement to include, but are not limited to, the following:

- Travis AFCEC ISS natural resources staff are involved in development of study methodology, data gathering, analysis, and/or report writing.
- Travis AFB and AFCEC ISS natural resources staff actively participate and collaborate in carrying out the project plan of work, review and approve activities, and help train or select project staff or trainees.
- Travis AFB and AFCEC ISS natural resources staff incur in-kind or direct expenditures in carrying out the activities specified in the project agreement. Examples include, but are not limited to, the following:
 - Providing staff time to work on the project.

3.0 DESCRIPTION OF OBJECTIVES

Conduct tasks in accordance with this Statement of Objectives, as prioritized by AFCEC ISS PM and Base Natural Resources Manager (NRM).

Travel, Coordination, and Project Management for all tasks is as follows:

Travel: Provide transportation and fuel for all NFE staff to get to and from all field sites. Retain current proof of insurance, current registration, and current REAL ID-compliant driver’s license for all modes of transportation.

Coordination: Coordinate concurrently with the Base NRM, AFCEC Travis ISS NRM, and USACE PM at a monthly Task Order review meeting. All work to be IAW this SOO and be consistent with the Project Schedule & Work Plan (Deliverable 9.8) approved by the USACE PM, AFCEC Travis ISS NRM and Base NRM. Schedule changes can be made; trade-off decisions are jointly made by the USACE PM, Base NRM and AFCEC Travis ISS NRM and align with the Sikes Act compliant INRMP and original RAM programming. Schedule should account for a government review period NTE 30 days. **The USACE Grants Officer must approve any changes in scope or cost.** All coordination with state and federal regulators is to be by the Base NRM or AFCEC ISS only. All NFEs conducting work under the Task Order should aim to attend the monthly meeting.

Project Management: Each task includes a section on level of effort specific to that task. A Task Order Project Manager should be assigned to coordinate across tasks, manage all personnel hired to complete work, and ensure all scoped objectives are completed under this TO on time. Level of effort for Task Order Project Management is expected to be at least 8 hours per week with an additional 500 hours as needed, generally at the beginning and end of the agreement period of performance and before and after monthly meetings. Project manager is to provide monthly meeting agenda, track, and staff deliverables for government review, provide meeting notes, etc.

References: The NFE is responsible for reviewing relevant historic data, survey methodologies, and previous management recommendations from old reports for each task in Section 3.0. See Travis 2022 INRMP.

Table 1. See table footnote and Section 6.0 for Period of Performance.

SubTask #	Project Number	Project Title	Base Year Requirement (R=Recurring)	Op 1	Op 2	Op 3	Op 4	Cost Ceiling (Base Year)
Travis AFB								
3.1 FUNDED	XDATA53247118 XDATA53257118 XDATA53267118 XDATA53277118 XDATA53287118	Mgt, Habitat	R	x	x	x	x	3.1.1 - \$133,572 3.1.2 - \$92,000 3.1.3 - \$305,000

3.2 FUNDED	XDATA53247119 XDATA53257119 XDATA53267119 XDATA53277119 XDATA53287119	Mgt, Species	R	x	x	x	x	\$113,000
3.3 FUNDED	XDATA5324915 XDATA5325915 XDATA5326915 XDATA5327915 XDATA5328915	Mgt, Wetlands/Floodplains	R	x	x	x	x	\$25,000
3.4 OPTION	XDATA53246119 XDATA53256119 XDATA53266119 XDATA53276119 XDATA53286119	Mgt, Habitat	R	x	x	x	x	\$12,000
3.5 OPTION	XDATA53246120 XDATA53256120 XDATA53266120 XDATA53276120 XDATA53286120	Mgt, Species	R	x	x	x	x	3.5.1 - \$25,000 3.5.2 - \$15,000
3.6 OPTION	XDATA53246121 XDATA53256121 XDATA53266121 XDATA53276121 XDATA53286121	Mgt, Invasive Species	R	x	x	x	x	3.6.1 - \$115,000 3.6.2 - \$16,000

Base Period of Performance (R): 18-months (3 months administrative period to complete on-boarding of employees and subcontractors, 12-month technical period for conducting field work, 3 months administrative for completion of reports only with no new work)

Follow-On Period of Performances (X or R): 18 months. Overlap in POPs is strictly administrative and includes on-boarding of employees and subcontracts before the start of work and completing of reports after completion of fieldwork.

Travis AFB

3.1 Mgt, Habitat [FUNDED]

3.1.1 – Programmatic Biological Opinion Implementation – ESA, Vernal Pools, Tiger Salamander [FUNDED]

Travis AFB has an Endangered Species Act, Section 7, Programmatic Biological Opinion (dated June 2018 and extended by USFWS until June 2025) that is currently under revision by the Base that requires pre-notification to the USFWS in support of the base's primary mission, support mission, and environmental activities.

Project includes preparation of consultation packages (pre-notification project analyses) by completing relevant field surveys including development of GIS maps and working with Base project proponents and project engineers to ensure accurate project details are reflected in the project analyses. Project supports Base Environmental on coordination with USFWS, including responses to questions on submittals. Project also includes review and coordination of Base project proponent Section 7 documents to ensure consistent submissions from Travis AFB to the USFWS. Assume up to 15 consultation packages annually. PBO support includes preparation of the PBO annual report, due annually in February, summarizing the year's consultations, mitigation purchase tracking, take allowance status, and any other requirements for submittal of the annual report as outlined in the PBO.

Support with analysis of any proposed species for federal listing that should be covered during the update of the PBA to determine if/how they need to be included in the PBA. At least two species, (monarch butterfly and northwestern pond turtle) are expected to become federally listed in 2024 while the PBA revision is being worked. Analysis of these 2 species is complete. Western spadefoot toad was listed in 2023, however, based on previous surveys on Travis AFB and GSUs, no western spadefoot toads were found, and no suitable habitat exists for this species, therefore they are presumed absent (INRMP 2022).

The following activities (INRMP projects related to the Travis PBO) may include, but are not limited to:

PROJECT 2.2.2. Update and resubmit the PBA, as needed, but at least every five years to maintain the most current programmatic biological opinion (PBO) from the USFWS.

PROJECT 2.2.4. Implement the PBO to include consultation, reporting, tracking (database) and monitoring.

PROJECT 2.3.4. Engage in ESA Section 7(a)(1) consultations with the Service for recovery of threatened and endangered species on Travis AFB.

Additional duties must be in direct support of ESA Section 7 compliance, and include:

- Write reports required by Section 7 concurrence letters, Biological Opinions (BOs), or Programmatic BO (PBO).
- Track project related impacts and take by BO/PBO for inclusion in reports to USFWS. Outlined in individual BOs/PBO are specific elements that need tracking.
- Write Informal (not likely to adversely affect conclusions or NLAAs) and/or Formal Consultations (Biological Assessments, BAs) for select projects, prioritizing projects where CEI or CE is the proponent. CE projects that are not done in-house should pay for their own Section 7. Review all Section 7 documents prepared by outside consultants to ensure consistency. Provide consultation templates to outside consultants.
- Complete documented field inspections daily Monday-Friday; all active projects require monitoring, at least, once per week to ensure compliance with Section 7 documentation; field inspections should be documented to include photos, a description of any issues found (findings), and corrective actions. Prepare inspection reports in a format that can be efficiently entered into eDASH/ Enforcement Actions, Spills, and Inspections Environmental Reporting (EASIER) database in support of the base's Environmental Management System (EMS) / Environmental Inspection Program (EIP). Track and follow up on corrective actions to closure. Enter/update findings in Travis AFB Tracker, and when requested by NRM, enter/update findings in eDASH Enforcement Actions, Spills, and Inspections Environmental Reporting (EASIER) database.
- Review TRIRIGA Work Requests / Work Clearance / Environmental Impact Assessment documentation (aka 103s, 813s, EIAP, etc.) as requested by NRM to determine impacts to listed species.
- Coordinate, organize, and maintain the Travis NR geodatabase.

Professional Requirements. The NFE to provide a qualified biologist with experience with California species, California ecosystem management, Endangered Species Act consultation processes, and Biological Opinions. When necessary, employ qualified person (s) that hold 10a1A permits for federally listed species that occur on Travis as they are required for some surveys. Qualified person (s) should have the required species experience/education for any ESA Section 7 monitoring for projects (refer to the 2017 Travis PBO section 1.4.3 Biological Monitor Qualifications). Provide at least one qualified biologist with wetland delineation capabilities. Requires extensive GIS support to meet BO requirements. At least one qualified person to have at least three years of GIS data management experience plus relevant education in GIS. Finally, NFE is to provide a biologist able to learn and train effectively in those tasks to which they are previously unfamiliar.

Meetings: Attend monthly task order coordination meetings (up to 12/yr.) and any project specific meetings if that project requires Section 7. AFCEC Travis ISS must approve attendance at other meetings to ensure work schedule is on time, the meeting topic is applicable to completion of Section 7 documentation, or attendance is necessary for base to remain in compliance with ESA.

Level of Effort: Requires **2000** hours of field effort and reporting annually by qualified individuals able to identify all sensitive and federally listed species in the field, analyze project impacts, and understand federal laws and permit requirements. Each year, conduct follow-up activities to previous years' work and/or conduct work in new areas and/or conduct work on new mission support projects. An alternate workspace off, but near, the installation may be utilized. For this project, NFE can telework on days when they do not have scheduled in-person meetings or site visits.

Outreach / Education / Training: Prepare training materials as needed, or per NRM request, on the Section 7 process, BO/PBO/NLAA requirements, etc. Provide training to base personnel as requested. NFE may attend any necessary trainings (up to 160 hours/PoP) related to enforcing and complying with the Endangered Species Act, species-specific trainings to improve existing expertise in species biology, and/or, for training purposes, accompany other contractors that are conducting relevant ESA species fieldwork. (See Qualifications Section 4.0).

Materials, Supplies, and Equipment: Provide all materials required to conduct work. This includes vehicle(s) and a work trailer to house all on-site personnel, laptops, ArcGIS licenses, etc. at Travis AFB.

Resource Management Outcomes: Compliance the ESA Section 7 to include implementation and enforcement of existing BOs and NLAAs, identification of new projects requiring Section 7, and completion of Section 7 documentation (reports and new consultations) and completion of field monitoring checklists. Outcome includes compliance with federal law.

Deliverables (see Section 6.0 also): Draft (MS word; .docx) and Final version required in .pdf with responses to government comments (if provided). Plan for government review period not to exceed (NTE) 30 days. Government comments provided in tracked changes or comment matrix.

Deliverables	Due Date
1. Project Analysis Packages (pre-notification consultations under the Travis PBO)	Within 45 days of receiving complete project description and maps
2. Monthly Activity Report (Field Inspection log and Inspection Reports)	5 th of each Month

3. PBO Annual Report (Calendar Year; due to USFWS 15 Feb)	02 Jan
4. Updated Annual GIS geodatabase	01 Oct (covers annual technical POP of 1 Sept-31 Aug)

3.1.2 – Biological Opinion Implementation – Emergency Formal Consultation on the Continued Airfield Operations during California Tiger Salamander Migration at Travis Air Force Base [FUNDED]

This project is intended to continue to implement requirements under the Emergency Biological Opinion (EBO), issued by the USFWS on October 12, 2017, as well as additional surveys (communication vault checks within airfield) that have been developed because of the findings during the 5-year study.

Background:

Over 150 federally threatened California tiger salamanders (Central California Distinct Population Segment) were found trying to cross the Airfield (Runway 21L) during daylight hours May-July 2017 resulting in unauthorized take of 39 salamanders.

The USWFS conferred with numerous staff, experts, and supervisors to decide upon a path forward regarding the management of CTS & continued airfield operations at Travis AFB. The EBO (USFWS 2017) required a five-year study to assess the CTS population on Travis AFB, starting in 2017 and ending in 2022, and the preparation of a CTS Long Term Migration Management Plan.

Results of Five-year Study: From the most recent CTS monitoring report, Results of 2023 California Tiger Salamander Monitoring on Travis Air Force Base, California (Marty, J.T. 2023), “of the initial five years, three were very dry (2018, 2020 and 2021) which limited the ability to make broader conclusions about the effectiveness of management actions on CTS populations at Travis AFB. In contrast, 2019 was a very wet year that resulted in many CTS produced at the Wilcox West Pond. While 2022 was close to normal in terms of the amount of rainfall, the timing of rainfall early in the season meant that many CTS breeding ponds dried prematurely. 2023 was a very wet year and provided a perfect contrast to the previous years’ data. Even with a truncated monitoring season, the total number of CTS recorded in 2023 exceeded all other years by nearly 1,000 CTS due to the immense number of juvenile CTS produced in the Wilcox West Pond.”

Status of CTS Long Term Migration Management Plan, as of Feb 2024: A Draft CTS Long Term Migration Management Plan (Feb 2022) was created and outlines 4 alternatives for CTS migration management around the airfield. In 2024, an assessment of the alternatives for California tiger salamander migration management on the Travis AFB airfield was initiated and is available for review in December 2024. The assessment of alternatives is to assist leadership in decision-making to update and finalization a CTS Long Term Migration Management Plan. Travis AFB is currently in

discussion with USFWS to extend the expiration date of the Travis EBO until November 2029 to finalize and implement a CTS long-term management plan.

Specific activities to be accomplished include, but not limited to:

This project continues to implement all the same conservation measures and reporting requirements from the 2017 EBO, to include, but not limited to:

- In spring (May-July) and fall (December-February), perform training for airfield operations staff and other maintenance staff that are likely to be on the runway or Perimeter Road before CTS begin migration to and from the breeding ponds.
- Establish a notification system between Travis AFB's airfield staff and NRM to be used when CTS are detected on airfield surfaces.
- During May-July and December-February, monitor weather (rainfall, humidity) and breeding pond activity to predict possible CTS migration across the airfield and Perimeter Road
- When CTS movement starts, inform airfield operations staff to be vigilant and to report any CTS sightings to the NRM team.
- Perform night-time monitoring of Perimeter Road for movement of CTS.
- Airfield Management conducts routine checks of 21L and ALZ runways for FOD. If CTS are observed, project coordinates to relocate any stranded CTS during daylight hours to suitable burrows in accordance with the Base's CTS relocation plan (Travis 2017)
- Partner with the adjacent landowners (Solano County, City of Fairfield, Wilcox Ranch) to develop a long-term management plan for strategies to implement adjacent to the breeding pond, which may influence CTS migration onto non-Air Force open space property, rather than towards TAFB's airfield.
- Continue the population assessment study to better understand CTS movement in the vicinity of the Base. The study includes the installation of drift fences and pitfall traps (seasonally, as needed), and night-time surveys to determine if, or how many, adult CTS return to the breeding pond, and how many juvenile CTS leave the pond. All handling conducted by biologists meeting qualifications outlined in the 2017 Travis PBO.
- Prepare and/or provide technical support in updating the CTS Long Term Migration Management Plan

Provide monthly or weekly email summaries, on CTS monitoring activity (dependent on seasonal CTS movement), to Travis NRM and AFCEC Travis ISS. Email summaries include, but not limited to the following details, EBO take status (including remaining take), CTS disposition (# captured/relocated from traps, # from rainy night surveys, etc.) and any other seasonal information regarding CTS movement or predictions. Email

summaries are meant to assist Base NRM with updating USFWS of CTS status on this project.

The following activities (INRMP projects relate to long term CTS migration management) may include, but are not limited to:

PROJECT 2.1.4 Investigate the use of surrounding conservation easement lands to relocate CTS.

PROJECT 2.2.5. Continue updating and preparing long term CTS Management Plan (per 2017 Emergency Biological Opinion)

PROJECT 2.3.2. Investigate the feasibility of making the airfield Low Risk CTS area by installing one way CTS wall as needed and relocating all caught CTS to an off-Base site.

PROJECT 2.3.5. Implement the feasibility of on-site mitigation options to offset mission impacts on CTS through (1) barriers and tunnels to allow the species' migration, while directing them away from mission activities (e.g., runway, taxiways, tarmac), (2) studying/implementing new equipment/procedures for installation of storm drains, irrigation boxes, electrical boxes, and other equipment that may trap CTS.

PROJECT 6.4.9. Implement state of the art projects to relocate or restrict CTS from airfield operations and maintenance.

Professional Requirements. The NFE to provide a qualified biologist with experience with California species, California ecosystem management, Endangered Species Act consultation processes, and Biological Opinions. Provide qualified person(s) that hold a 10a1A permit for California tiger salamander, able to identify all sensitive and federally listed species in the field, analyze project impacts on the sensitive and federally listed species occurring on Travis AFB, understand federal laws and permit requirements, and experience with Endangered Species Act consultations. Qualified person (s) to have the ability to obtain qualifications necessary to carry out Travis PBO and other Biological Opinion requirements (refer to Travis PBO for qualifications). Finally, provide a biologist able to learn and train effectively in those tasks to which they are previously unfamiliar. At least one qualified person to have at least three years of GIS data management experience plus relevant education in GIS.

Meetings: Attend monthly task order coordination meetings (up to 12/yr.) and any project specific meeting if that project requires Section 7. AFCEC Travis ISS must approve attendance at other meetings to ensure work schedule is on time, the meeting topic is applicable to completion of Section 7 documentation, or attendance is necessary for base to remain in compliance with ESA.

Level of Effort: Requires **1100** hours of field effort and reporting annually. Each year, conduct follow-up activities to previous years' work and/or conduct work in new areas and/or conduct work on new mission support projects. An alternate workspace off, but

near, the installation may be utilized. For this project, NFE can telework on days when they do not have scheduled in-person meetings or site visits.

Outreach / Education / Training: Prepare training materials as needed on California tiger salamander status on Travis AFB, BO/PBO/NLAA requirements, etc. Provide training to base personnel as requested. NFE may attend any necessary trainings (up to 160 hours/PoP) related to enforcing and complying with the Endangered Species Act, species-specific trainings to improve existing expertise in species biology, and/or, for training purposes, accompany other contractors that are conducting relevant ESA species fieldwork. (See Qualifications Section 4.0).

Materials, Supplies, and Equipment: Provide all materials required to conduct work. This includes vehicle(s) and a work trailer to house all on-site personnel, laptops, ArcGIS licenses, etc. at Travis AFB.

Resource Management Outcomes: Compliance with the Emergency Formal Consultation on the Continued Airfield Operations during California Tiger Salamander Migration at Travis Air Force Base. Improve knowledge of CTS use of the airfield to determine what actions are required by the AF to close out the Emergency Airfield Operations BO. The data also informs conservation measures specific to work occurring in the airfield area and daily airfield activities. Identify urgent issues and recommend solutions. Each year, conduct follow-up activities to previous years' work and/or conduct work in new areas.

Deliverables (see Section 9.0 also): Draft (MS word; .docx) and Final version required in .pdf with responses to government comments (if provided). Plan for government review period not to exceed (NTE) 30 days. Government comments provided in tracked changes or comment matrix.

Deliverables	Due Date
5. Airfield Ops BO- Annual CTS Work Plan	15 Sept (prior to start of field work)
6. GIS geodatabase	01 Oct (end of task order)
7. Airfield Ops BO- Annual CTS Report	01 Oct (end of task order)
8. Updated Annual GIS geodatabase	01 Oct (covers annual technical POP of 1 Sept-31 Aug)

3.1.3 - ESA Compliance, Management Endangered Species Habitat -Vernal Pool Species and California Tiger Salamander Upland Habitat [FUNDED]

The NFE to support the Natural Resources Program by providing administrative support, technical expertise and training, and field support to the natural resources program project planning and implementation, natural resources biological monitoring of Base projects, data collection, recordkeeping, wildlife surveys, and assistance on other sub-tasks, as needed. Apply for, plan, implement, track, monitor compliance, and report

on Endangered Species Act (ESA) consultations. To ensure proper ESA species management, provide GIS support to ensure consistent data collection methods and maintenance of NR geodatabase. The primary objective is to provide services and deliverables to the TAFB NRM (60 CES/CEIE) in achieving compliance with Federal, State, and Local environmental regulations for base activities through biological oversight, training, report preparation, project reviews, and monitoring. Project schedule and priorities are to be approved by the TAFB NRM and AFCEC Installation Support Section (ISS) Program Manager(s) (PM), as mission requirements change day-to-day.

The following specific tasks to be accomplished BASE YEAR & ALL OPTION YEARS:

Conservation Program Support: Project Reviews and Construction Oversight & Monitoring:

- Serve as technical authority/focal point for assigned projects.
- Review TRIRIGA Work Requests / Work Clearance / Environmental Impact Assessment documentation (aka 103s, 332s, 813s, EIAP, etc.) as requested by NRM, to determine impacts to listed species.
- Provide maps to reflect natural resources information for 813s, work tasks, etc., and/or when leadership requests a particular map.
- Conduct pre-project bird surveys and according to project activities, provide recommendations for buffers and any other conservation measures for the protection of migratory birds in compliance with the MBTA.
- Communicate and coordinate assigned project issues with superiors, team members, higher headquarters, regulatory agencies, other installation units, community, and other officials, and/or interest groups.
- Develop and present briefing packages and prepare a variety of environmental related reports.
- Serve as technical consultant for reports/surveys/maps, etc.
- Prepare proposed responses to congressional inquiries, audit reports, inspection reports, press releases, and public concerns.
- Ensure adherence to Federal, State, and local codes concerning health, safety, and the environment and adherence to security practices.
- Provide project specific biological monitoring of Grounds Maintenance activities and Wildland Fire Maintenance (e.g., herbicide spraying, firebreaks, mowing) when they occur near sensitive areas (vernal pools, CTS pitfall trapline, nesting birds, etc.) by implementing avoidance measures (e.g., flag vernal pool/wetland features, CTS pitfall trap line, designate access routes, etc.) and monitoring activities.
- Collect data and report inspections and findings in a format (Times New Roman, Font 11 or 12 for all reports) that can efficiently be entered into eDASH/EASIER in support of the base's Environmental Management System (EMS) / Environmental Inspection Program (EIP). Track and follow up on corrective actions associated with findings.

- Investigate damage to natural resources from unknown or known sources (e.g., vehicle ruts) for impacts to mapped or unmapped vernal pools/wetlands, as needed. Provide recommendations for restoration and monitoring in a technical memorandum. Implement restoration and monitoring following any consultation (if required) with federal/state agencies. Prepare follow-up restoration and monitoring reports, as required.

Assist in preparing Travis notices of violation to contractors regarding findings.

- Due to overlap in the natural resources and storm water programs, the NFE supports by assisting CEIE staff on storm water protection during project planning, implementation, and project site inspections and reporting. While performing natural resources inspections, the NFE also include on their overview checklist storm water inspection items. Any findings in those areas are to be referred to the appropriate 60 CES/CEIE program manager for resolution.
- Conduct site-specific surveys daily to identify areas of potential conflict between mission projects and the protection of wetlands and special-status species and habitat. Suggest modifications to project design to avoid or minimize impacts to resources.
- NFE to obtain and maintain an airfield driving license for access to the airfield for construction project monitoring for natural resources compliance. Coordinate with AFCEC Travis ISS Restoration Program Managers for classroom training and driving training.
- Monitor construction projects and sites for compliance with environmental regulations and construction Best Management Practices. Field monitoring should occur daily during the construction season. During the Limited Operations Period (i.e., wet season) any inactive or active construction sites should be checked a minimum of once/week or more often before, during, and after rain events.
 - Minimum 4 days/week and 12 hours per week of field visits during construction season.
 - Prepare a template inspection sheet for NR compliance and storm water compliance for Base & AFCEC review.
 - For each inspection, complete inspection sheet and prepare a summary of corrective actions needed and coordination to resolve.
 - Monitor resolutions for close-out of inspection findings.
 - Perform initial upload of findings and corrective actions into the Enforcement Actions, Spills, and Inspections Environmental Reporting (EASIER) database at the Base Program Manager discretion.

Environmental Awareness Training:

- Prepare and implement up to 30/year environmental training sessions for Grounds Maintenance, Civil Engineer Shops, Security Forces, and other

entities that perform routine activities (e.g., disking, tree trimming, herbicide spraying, ditch maintenance, off-road vehicle users, etc.) that may impact migratory birds and sensitive and listed species.

- In coordination with Base NRM, review routine work activities (Grounds Maintenance, Civil Engineer Shops, Security Forces, and other entities that perform routine activities) and coordinate with entities to:
 - Hold two (2) coordination meetings annually to understand work activities that may impact T&E species and habitat.
 - Anytime there are new contracts for grounds management; review and provide comments.
 - Update NR Awareness training slides and any hand-outs, as information changes with updated survey information from year to year. Emphasis on T&E species and habitat, wetlands, Burrowing owl (BUOW), Western Pond turtle (WPT), and Migratory birds related to specific routine activities.
 - Schedule training 2x per year for each shop/entity, ideally before the wet season in Sept/Oct, and during spring Apr/May
 - Tailor training and slides for each shop/entity based on type of work/activities that are carried out for the time of year (spring/summer and fall/winter)
 - Deliver training, record attendance, track, and file training records.
 - Design and implement a NR training program specific to Ground Maintenance activities with goal to reduce spread of invasive species (equipment cleaning), educate on avoidance of herbicide spraying within 250 feet of vernal pools/wetlands/ditches/CTS pitfall trap lines, and prepare NR maps for use/education, etc.
- Support quality improvement and promote the environmental awareness program by helping prepare for and attending environmental outreach events (Earth Day, Public Lands Day, etc.)

Natural Resources Geographical Information Systems (GIS) Support:

- Assist Geographic Information Systems (GIS) for the Environmental Office, which includes creating maps, analyzing data and projects, collecting data via Global Positioning System (GPS), and working with environmental GIS files.
- Perform maintenance on GIS files, ensuring consistent file organization and naming conventions. Coordinate closely with AFCEC GIS NFE.
- As new natural resources data are available, update existing layers. Coordinate closely with AFCEC GIS NFE.
- Coordinate, organize, and maintain NR geodatabase.

Additional duties must be in direct support of ESA Section 7 compliance, and include:

- Write reports required by Section 7 concurrence letters, Biological Opinions (BOs), or Programmatic BO (PBO).
- Track project related impacts and “take” by BO/PBO for inclusion in reports to USFWS. Individual BOs/PBO outline specific elements that need tracking and reporting.
- Write Informal (not likely to adversely affect conclusions or NLAAs) and/or Formal Consultations (Biological Assessments, BAs) for select projects, prioritizing projects where CEI or CE is the proponent. CE projects that are not carried out by in-house personnel should pay for their own Section 7. Review all Section 7 documents prepared by outside consultants to ensure consistency. Provide consultation templates to outside consultants. Production of meeting materials, meeting minutes, and document review comments are also expected, for up to 5 project meetings associated with consultation documents. Environmental documentation for government review and approval also required.
- Complete field inspections of approved projects to ensure compliance with Section 7 requirements; produce field reports to include photos and a description of any issues found. Summary of inspections and any findings to be entered into the AF eDASH/EASIER database and tracked through closure, at discretion of NRM.
- Implement conservation measures for projects, as required by the Programmatic Biological Opinion and other applicable Biological Opinions (i.e., Airfield Ops/Salamander Recovery BO). This includes airfield operations minimization measures and recovery minimization measures which may include, but are not limited to, set up and take down of pitfall trap fence lines, daily checks of pitfall trap fence lines, and/or California tiger salamander relocation, by qualified biologists (qualifications outlined in Travis PBO).

Activities may include, but are not limited to the following INRMP projects:

PROJECT 2.3.1. Manage vegetation using mowing, grazing, and/or prescribed burning in the conservation areas, to enhance T&E species habitat by coordinating with the Fire Department and Grounds Maintenance contract.

PROJECT 4.2.3. Develop a Predator Reduction Plan to reduce CTS predators (e.g., bullfrogs, fish) from the ponds in Castle Terrace Conservation Area to include a monitoring plan that details monitoring activities and thresholds for additional treatment. ONE TIME ONLY

PROJECT 4.2.4. Implement a Predator Reduction Plan to reduce CTS predators (e.g., bullfrogs, fish) from the ponds in Castle Terrace Conservation Area. Monitor activities and thresholds for additional treatments. BASE YEAR & ALL OPTION YEARS

PROJECT 5.1.1. Ensure specialized training for natural resources management (NRM) staff in Endangered Species Act, Migratory Bird Treaty Act, Sikes Act, the Clean Water Act and other similarly applicable federal and state laws and United States Air Force regulations responsible for maintaining and protecting natural resources.

PROJECT 5.1.3. Train NRM in-house staff and contractors to get appropriate qualifications to conduct federally listed species surveys on Travis AFB.

PROJECT 5.1.5. Provide annually and as needed NR Awareness training to all Base key personnel such as Airfield Management, Flight Safety, PRIDE, Pest Shop, Golf Course, etc., and on-site construction work crews.

PROJECT 6.4.3. Evaluate and minimize grounds maintenance activities on special-status species in the cantonment area with support from PRIDE.

Base Access Coordination. The NFE coordinates base access for contractor personnel working on conservation projects supporting compliance on Travis AFB. The NFE escorts contractor personnel on and around Travis AFB, when necessary.

Professional Requirements. NFE should provide a qualified biologist with experience with California species (flora and fauna), ESA Section 7 document preparation and compliance, and ability to become a qualified biologist to support the Travis PBO and other Travis Biological Opinions (qualifications outlined in the Travis PBO and pertinent Biological Opinions). The NFE to stay current on all applicable training needed to perform the tasks and continued training/education to become qualified biologist(s) for Vernal pool fairy and tadpole shrimp (VPFS/VPTS) and Contra costa goldfields (CCG), and preferably with military conservation experience. Finally, NFE to provide a biologist able to learn and train effectively in those tasks to which they are previously unfamiliar. At least one qualified person to have at least three years of GIS data management experience plus relevant education in GIS.

Meetings: Attend monthly task order coordination meetings (up to 12/yr.) and any project specific meeting if that project requires Section 7. AFCEC Travis ISS must approve attendance at other meetings to ensure work schedule is on time, the meeting topic is applicable to completion of Section 7 documentation, or attendance is necessary for base to remain in compliance with ESA.

Level of Effort. Biologist(s) to perform **5,000** hours on this sub-task. Anticipated training needs and costs should be detailed in the proposal. The NFE is to be present on the base working in coordination with the Travis Environmental Office five days per week, Monday-Friday, excluding Federal holidays and designated Air Mobility Command family days to perform construction site inspections (during the dry & wet season). An alternate workspace off, but near, the installation may be utilized.

Outreach / Education / Training: Prepare training materials as needed on T&E species status on Travis AFB, BO/PBO/NLAA requirements, etc. Provide training to Base NR

staff and base personnel as requested. NFE may attend any necessary trainings (up to 160 hours/PoP) related to enforcing and complying with the Endangered Species Act, species-specific trainings to improve existing expertise in species biology, and/or, for training purposes, accompany other contractors that are conducting relevant ESA species fieldwork. (See Qualifications Section 4.0).

Materials, Supplies, and Equipment: Provide all materials required to conduct work. This includes vehicle(s) and a work trailer to house all on-site personnel, laptops, ArcGIS licenses, etc. at Travis AFB.

Vehicle & Field Equipment. The biologist requires use of an NFE-provided vehicle for daily use to travel to/from project sites on the base, perform biological data collection, escort contractors performing natural resources work on base, and attend training. The biologist requires a tablet with a data plan and must be compatible with the base's GIS system to use on site visits. NFE will be able to use TAFB equipment, i.e., mule, augers, etc.

Reach Back Support, Senior Ecologist(s). The NFE to provide senior ecologist with experience with California species and California ecosystem management for technical assistance supporting the Natural Resource program at Travis AFB part-time in support of this Task Order in Endangered Species Act, Migratory Bird Treaty Act, Clean Water Act, and Sikes Act compliance. Senior ecologist independently provides review, comments, and guidance to the Staff Biologist(s) on this TO, and, as requested to the Travis NR PM and AFCEC Travis ISS.

Level of Effort. Up to **200** hours of part-time reach back support are required for senior-level ecologist(s).

Professional Requirements (Reach Back Support, Senior Ecologist). The individual(s) accomplishing the senior ecologist tasks must have either an advanced degree (MS or PhD) in the biological or natural sciences or a BS degree in the biological sciences and 10 years' experience working with California threatened and endangered species. Some hours should be allocated for a permitted California Tiger Salamander biologist or someone meeting the technical requirements for such a permit. Experience in writing environmental permit applications, writing environmental assessments, and working with construction contractors is required. Additionally, experience specific to Travis AFB is desired.

Resource Management Outcomes: Identify urgent issues and recommend solutions. Each year, conduct follow-up activities to previous years' work and/or conduct work in new areas.

Deliverables (see Section 9.0 also): Draft (MS word; .docx) and Final version required in .pdf with responses to government comments (if provided). Plan for government review period not to exceed (NTE) 30 days. Government comments provided in tracked changes or comment matrix.

Deliverables	Due Date
9. Monthly Activity Report (Inspection Reports, Technical Memorandums)	5 th of the Month
10. ESA Consultation Packages (as needed)	Within 45 days of receiving complete project description and maps.
Technical Memorandums (as needed)	01 Oct
11. New/Updated Training Materials	01 Oct (end of task order)
12. Quarterly Tracking Spreadsheet (list of meetings & trainings attended)	05 Dec (Sept-Nov reporting) 05 Mar (Dec-Feb reporting) 05 Jun (Mar-May reporting) 05 Sep (Jun-Aug reporting)
13. Updated Annual GIS geodatabase	01 Oct (covers annual technical POP of 1 Sept-31 Aug)

3.2 MGT, SPECIES [FUNDED]

Federally Listed Species Surveys, Monitoring, and Management

Complete federally listed, proposed, and candidate species survey, monitoring, and management activities to support the 2022 signed INRMP/present INRMP goals and objectives. Species include, but are not limited to, vernal pool fairy shrimp, vernal pool tadpole shrimp, California tiger salamander, monarch butterfly, western bumble bee, Crotch's bumble bee, western pond turtle, Little brown bat, and Contra costa goldfields. Monitor, as needed, and/or requested by the NRM, federally listed species that are not presently found on AF properties but have potential.

Implement habitat management activities for federally listed species at Travis AFB. Align activities with the Resource Management Outcome below. Survey and monitoring activities may include, but are not limited to:

- Implement the Wetland Restoration and Monitoring Plan for the Mineral Firebreak Biological Opinion issued to Travis AFB by USFWS on March 24, 2022 (file #2022-0000548), when needed. This includes yearly monitoring, taking pictures, GIS locations and preparation of any reports required under the BO or Wetland Restoration and Monitoring Plan for Travis AFB submittal to USFWS. Biological Opinion requires five years of vernal pool monitoring and reporting annually by 1 January. **BASE YEAR & ALL OPTION YEARS**
- Monitor each federally listed species as required under Biological Opinions or other agreements and for every project that may impact federally listed species.
- Conduct planning-level surveys in areas planned for future mission activities. List of locations to be determined in coordination with Base NRM and Base Community Planner.

- Make annual efforts to implement survey and monitoring needs for at-risk species as outlined in INRMP.
- Most species are to be monitored every 2 years, unless specified otherwise.
- Newly listed (or species proposed for federal listing) are to be monitored annually for 5 years to establish a baseline of presence or absence. If present, then monitoring would occur every 2 years. If absent, monitoring would reduce in frequency to once every 5 years.
- **Vernal Pool Fairy Shrimp / Tadpole Shrimp** – conduct non-protocol level surveys on Travis AFB (approximately 150 wetland acres), including the Cypress Lakes Golf Course GSU, and Railroad Right of Way easement every 2 years and at NRM request. FOLLOW-ON PERIODS 1 & 3
- **Pollinator Species:** The Monarch butterfly is slated for ESA federal listing in 2024 and the California Natural Diversity Database (CNDDDB) tracks 6 bumble bees (*Bombus* sp.) that are identified as species of greatest conservation need. The Crotch bumblebee (*B. crotchii*) is one of these six bees and was observed using habitat on Travis AFB during surveys in 2021, 2022, and 2023. Travis lacks sufficient floral resources that provide habitat for bumble bees (Marty 2022). Despite presence of suitable habitat on Travis AFB and GSUs, the Western bumble bee has not been found during surveys of Travis AFB or GSUs. Project includes planning, implementation, and management of pollinator habitat projects. Perform monitoring and maintenance of planted sites. Plant native species in ecologically appropriate areas only to maximize success of plantings and minimize impacts to existing resources. This task only applies to wildlands, not cantonment or landscaped areas.

The following specific tasks to be accomplished BASE YEAR & ALL FOLLOW-ON PERIODS:

- **Bumble Bee Surveys:** Conduct two field seasons of species-specific surveys to monitor the status on Travis AFB and GSUs. Surveys to include habitat assessments as needed. Survey should include newly planted native pollinator restoration sites.
 - **Crotch bumble bee** (*Bombus crotchii*) was recently petitioned for state listing under the California Endangered Species Act <http://www.fgc.ca.gov/CESA/index.aspx#bb>
 - **Western bumble bee** (*Bombus occidentalis occidentalis*) was historically known from Solano and Yuba counties. In California, western bumble bees are currently largely restricted to high elevation sites in the Sierra Nevada (Xerces Society 2012), though there have been a couple of observations of this species on the northern California coast (Xerces Society et al. 2017).
- **Monarch Butterfly:** Two field seasons of base-wide species-specific survey is needed at Travis AFB and GSUs to acquire information about

the species' status (presence/absence/abundance/seasonal uses), distribution, habitat availability (key features/suitable habitat), and threats. Surveys to include habitat assessments to identify and create a suitable habitat GIS layer. Modeled habitat suitability is not required. Survey and map native milkweed plants in key habitats or where they are located near mission activities.

- **Pollinator Habitat Management:** Evaluate options for adding nectar habitat to support pollinator species during both the early spring and late summer months and implement in Base approved locations (main Base and/or GSUs).

- **Western Pond Turtle:** Surveys to be conducted to monitor populations in known locations and determine use of other ponds/streams where they have not been detected in the past.
 - Update estimated nesting habitat GIS layer, as needed.
 - Investigate areas suitable for pond basking structures and install basking structures. Mow areas adjacent to water features to provide access to nesting locations.
 - Re-locate western pond turtles from impoundments, if necessary, as a result of repair, maintenance, or other projects.
 - Conduct pre- and post-relocation and pond project monitoring for projects with pond modifications, maintenance activities, or improvements to determine the species' response. Monitoring of control sites required.
 - Review and implement, when appropriate, the DoD Natural Resources Legacy Program's "Recommended Best Management Practices for the Western Pond Turtle on Department of Defense Installations", which includes the following:
 - DoD Partners in Amphibian and Reptile Conservation (PARC) Inventory and Monitoring Techniques
 - DoD PARC BMPs outside the Wildlife Exclusion Zone (WEZ):
 - Define western pond turtle occupation.
 - Monitor population trends.
 - Reduce invasive species and introduction mechanisms.
 - Identify nesting locations and protect nests.
 - Identify nesting hazards and enhance nesting habitat.
 - Maintain and increase transitory and overwintering habitat.
 - Enhance western pond turtle basking habitat.
 - Maintain the integrity of shoreline areas.
 - Remove barriers and dams between ponds, streams, and nesting habitats.
 - Implement design modifications for artificial ponds used for irrigation, stormwater mitigation, golf

- courses, or other human needs so that they can support wildlife.
 - Be alert for poaching activity.
 - Consider population manipulations that aid recovery.
 - Seek collaborations with species conservation and recovery-focused scientists.
- **Bats:** Conduct annual general acoustic monitoring at established points, following the NABat protocol in the summer; organize and submit data to the North American Bat Monitoring Program (NABat). Depending on funding and recommendations, consider adding additional monitoring points, or increasing the frequency of monitoring at the established points.
 - **Little Brown Bat** – survey and monitor areas known to be used by this species (as identified in the 2023 bat survey report). This species is under review for federal ESA listing.
 - **Hoary Bat** – survey and monitor areas known to be used by this species as identified in the 2023 bat survey report. This species is under review for potential federal Endangered Species Act (ESA) listing.
 - **Western Red Bat** - survey and monitor areas known to be used by this species as identified in the 2023 bat survey report. This species is a California species of special concern.

Activities may include, but are not limited to the following Travis INRMP (2022) projects/present INRMP:

PROJECT 1.2.3. Maintain and enhance pollinator habitat, focusing in conservation areas, with plantings of native wildflowers and other pollinator friendly plant species.

PROJECT 1.2.5: Safeguard the Western Pond Turtle through the development of Best Management Practices currently established on Travis and look to developing new BMP's through the DoD Natural Resources Legacy Program in "Recommended Best Management Practices for the Western Pond Turtle on Department of Defense Installations."

PROJECT 1.3.5. Monitor populations and habitat quality for bats by conducting surveys in the conservation areas, around the airfield, commissary and B-139.

PROJECT 2.1.1. Conduct habitat/species surveys and/or habitat suitability modeling (e.g., CTS high-risk maps) to include federal and state protected plant and other wildlife species on the base, all GSUs, and proposed DoD REPI parcels.

PROJECT 2.1.2. Conduct surveys for California tiger salamanders (CTS) (eggs, larvae, and adults). BASE YEAR & ALL FOLLOW-ON PERIODS

- Drift fencing and pitfall traps are required to be managed and monitored in up to 2 locations twice per year to study both juvenile and adult CTS movements with the intention of validating the Travis AFB CTS Risk Map in the Travis Programmatic Biological Opinion. This includes the Wilcox West Pond directly adjacent to Travis AFB property (City of Fairfield property). Early coordination with the Travis NRM to obtain a Right of Entry (ROE) from the City of Fairfield for access is necessary for this project.
- Egg grid surveys and visual egg surveys to occur in up to 10 potential breeding ponds or waterways on the base and in the Wilcox West Pond directly adjacent to the base.
- Larval surveys to occur in up to 5 historic or potential breeding ponds and the Wilcox West Pond directly adjacent to the base.

PROJECT 2.1.3. Investigate the use of environmental DNA (e-DNA) as a survey and monitoring technique to determine presence/absence of CTS. FOLLOW-ON PERIOD 1

PROJECT 2.3.3. Study solitary and social bees in conservation areas to determine presence and abundance of these important pollinators that enable Contra Costa goldfields populations to survive. Requirement: BO 1-1-99-F-84. BASE YEAR & FOLLOW-ON PERIODS 2 & 4

PROJECT 3.1.7. Conduct a USFWS 2-year protocol survey of vernal pool listed species.

PROJECT 4.1.4. Continue to implement the ground squirrel management plan in partnership with the Pest Shop.

PROJECT 5.1.3. Train NRM in-house staff and contractors to get appropriate qualifications to conduct federally listed species surveys on Travis AFB.

PROJECT 5.4.5 Identify and implement development of interpretive projects to educate base personnel and the public on native ecosystems, wildlife and fish habitat, and wetland laws and requirements for protecting sensitive natural resources. This would include CTS/Wetlands workshop if time allows.

PROJECT 6.2.3. Maintain compatible land use practices, fencing, and educational signs in and around conservation areas in accordance with previous regulatory consultations and permits. FOLLOW-ON PERIOD 1

PROJECT 6.2.6. Maintain the Castle Terrace Conservation Area trails and signs to enhance the educational potential of this asset. Requirement: BO 1-1-99-F-84. FOLLOW-ON PERIOD 1

PROJECT 6.3.4. Monitor the Contra Costa goldfield sites on Base during the March through May period utilizing photos and other mechanical means to document current population status.

PROJECT 6.4.6. Establish pollinator gardens to support native species and encourage milk weed for Monarch butterflies.

PROJECT 6.4.7. Establish seedbank for Contra Costa goldfield using the USACE Cold Region Research and Engineering laboratory or a facility with existing Contra Costa goldfield seeds; Develop a plan to establish plants in high wetland habitat. Research and conduct a feasibility study year 1 and/or 2. Year 2 and/or 3 establish design. Year 3 and/or up to 6 years to implement the project. FOLLOW-ON PERIOD 1

Professional Requirements: NFE should provide a qualified biologist with experience with identifying California species (flora and fauna) as well as all species on this subtask. NFE should possess any required permits to conduct species surveys outlined in this sub-task. Biologist(s) should have experience identifying and surveying at-risk species that could occur on the base. Finally, NFE to provide a biologist able to learn and train effectively in those tasks to which they are previously unfamiliar. At least one qualified person to have at least three years of GIS data management experience plus relevant education in GIS.

Meetings: Attend monthly task order coordination meetings (up to 12/yr.). AFCEC Travis ISS must approve attendance at other meetings to ensure work schedule is on time.

Level of Effort: Approximately **1,000** hours of field effort and reporting is expected per POP by a permitted biologist(s) who has experience identifying and surveying at-risk species that could occur on the base. Project management and Other Direct Costs (ODCs) are in addition to this effort. Effort is seasonal and variable based on target species. Each year, conduct follow-up activities to previous years' work and/or conduct work in new areas. An alternate workspace off, but near, the installation may be utilized. For this project, NFE can telework on days when they do not have scheduled in-person meetings or site visits.

Outreach / Education / Training: Prepare pamphlets/fliers as requested to help educate base residents and the public on federally listed, proposed, and candidate species issues. Provide training to base personnel as requested (up to 4/POP). No NFE training anticipated. (See Qualifications Section 4.0).

Materials, Supplies, and Equipment: Provide all materials, supplies, and equipment required to conduct work.

Resource Management Outcomes: Implement sensitive species monitoring and management needs from the 2022 INRMP. Desired outcome is to 1) understand threats to the species from mission activities, 2) identify management activities to benefit species populations, and 3) implement management strategies to provide a conservation benefit that decreases the likelihood of federal petitions or listing under the ESA.

Deliverables (see Section 9.0 also): Draft (MS word; .docx) and Final version required in .pdf with responses to government comments (if provided). Plan for government review period not to exceed (NTE) 30 days. Government comments provided in tracked changes or comment matrix.

Deliverables	Due Date
14. Annual Action Plan	05 Nov prior to commencement of field work and with enough time to apply for any needed permits
15. Species Annual Activity Report	01 Oct (end of task order)
16. New Training Materials (as needed)	Within 30 days of completion and/or 15 July
17. Quarterly Tracking Spreadsheet (list of meetings & trainings attended)	05 Dec (Sept-Nov reporting) 05 Mar (Dec-Feb reporting) 05 Jun (Mar-May reporting) 05 Sep (Jun-Aug reporting)
18. Updated Annual GIS geodatabase	01 Oct (covers annual technical POP of 1 Sept-31 Aug)

3.3 MGT, WETLAND/FLOODPLAINS [FUNDED]

Monitor Wetlands

Comply with Section 404 of the Clean Water Act and NPDES Aquatic Weed Permit. Includes office and fieldwork required to implement 404 permit applications/permits. Review base projects to evaluate need for 404 permits. Prepare regulatory submittals for projects where CE and NR are the project proponents. Conduct project-specific wetland verification or delineation for 404/401 applications. Implement requirements from existing permits. Implement NPDES Aquatic Weed Permit and perform needed tracking, monitoring, and reporting requirements not supported by Base F2F contract (water quality monitoring and reporting, for instance, is covered under a F2F requirement). NPDES permit-required data sheets that require information about chemical application and weather conditions during the weed control event would be conducted under this Task Order.

Activities and INRMP projects under this subtask may include, but are not limited to:

Known CWA 404/NPDES permits that require implementation, tracking, monitoring, and reporting:

- NPDES Aquatic Weed Permit – requires spray event monitoring. Deconflict activities such as water quality sampling with the Travis F2F contract.
- Minimize potential impacts on wetlands resulting from routine land management activities (e.g., firebreak disking, prescribed burning).
- New projects yet to be determined.
- Perform wetland delineation/field verification, as needed.

- Wetlands that are monitored before and after construction project implementation or monitored after accidental damage should also include periodic measurements and documentation of pH, conductivity, temperature, and dissolved oxygen to look at general trends or to provide comparisons to reference vernal pools.
- Assist in preparing and/or reviewing Clean Water Act compliance documents and conducting monitoring under existing CWA documents at TAFB.
- Attend meetings, prepare meeting materials, and meeting minutes for CWA projects.

PROJECT 3.1.1. Continue updating Preliminary Jurisdictional Delineation of wetlands on Travis AFB and update GIS data accordingly and conduct a cumulative analysis to quantify disturbance, degradation, or modification of wetlands and vernal pool species habitat.

PROJECT 3.1.2. Study the hydrological functioning of wetlands using new technologies (e.g., real-time kinematic [RTK]\ global positioning system (GPS) watershed mapping and water level loggers) in order to inform consultations, permits and post-construction monitoring in support of mission activities.

PROJECT 3.1.3. Complete consultations with the Regional Water Quality Control Board and the U.S. Army Corps of Engineers on base actions impacting wetlands.

PROJECT 3.1.5. Control exotic plant species that threaten wetland resources.

PROJECT 3.1.6. Update the wetlands GIS layer, resolve conflicting data between former mapping studies, and include information regarding wetland type, hydrology, weed infestation, and special-status species association.

PROJECT 3.3.1. Implement the North Gate Pond Management Plan, with support from Pest Management Shop, to include management, monitoring, and control of native and invasive plant and fish species, pond water levels, and pond water quality.

PROJECT 3.3.2. Implement management plan for controlling vegetation in Union Creek to reduce BASH hazards.

PROJECT 6.4.8. Create wetlands in high wetland habitat on Travis AFB; to allow for wetland growth and ensure no net loss for future projects areas. Research and conduct a feasibility study year 1 and/or 2. Year 2 and/or 3, establish design. Year 3 and/or up to 6 years to implement the project. FOLLOW-ON PERIOD 1

Professional Requirements. Multiple skill sets are required to accomplish this Sub Task;

Wetland Verification/Delineation: Provide at least one qualified biologist with experience working with California wetlands, delineating wetlands, interpreting Clean Water Act permitting requirements, and preparing technically sufficient documents.

Permitting/Regulatory Support: The individual accomplishing the permitting tasks must have a Bachelor of Science degree in a science field, in the biological or natural sciences and at least 3 years of experience working with California wetlands, interpreting Clean Water Act permitting requirements, writing environmental permit applications, and preparing technically sufficient documents.

GIS Support: At least one qualified person to have at least three years of GIS data management experience plus relevant education in GIS.

Meetings: Attend meetings on mission projects that require CWA Section 404/401 or NPDES Aquatic Weed Permit coverage. AFCEC Travis ISS must approve attendance at other meetings to ensure work schedule is on time.

Level of Effort: Project requires approximately **300** hours for a biologist, GIS analyst, and technical editor, annually. All reports to be completed by biologists with appropriate skills. Each year, conduct follow-up activities to previous years' work and/or conduct work in new areas. An alternate workspace off, but near, the installation may be utilized. For this project, NFE can telework on days when they do not have scheduled in-person meetings or site visits.

Outreach / Education / Training: Prepare pamphlets/fliers as requested to help educate base personnel on CWA Section 404/401 requirements. Provide training to base personnel as requested (up to 2). NFE may attend (up to 40 hours/POP) CWA Section 404/401 specific training or wetland delineation related classes to include plant or soil identification classes (See Qualifications Section 4.0).

Materials, Supplies, and Equipment: Provide all materials, supplies, and equipment required to conduct work.

Resource Management Outcomes: Ensure compliance with CWA Section 404/401 and NPDES Aquatic Weed Permit and preparing 404/401 permit applications as needed. Use of newer technologies for hydrology monitoring of wetlands is encouraged to improve information needed for permit applications, in many cases reducing permit-required mitigation through monitoring. Each year, conduct follow-up activities to previous years' work and/or conduct work in new areas.

Deliverables (see Section 9.0 also): Draft (MS word; .docx) and Final version required in .pdf with responses to government comments (if provided). Plan for government review period not to exceed (NTE) 30 days. Government comments provided in tracked changes or comment matrix.

Deliverables	Due Date
19. Clean Water Act Permit Applications (as needed)	Within 45 days of completion of field work and receipt of complete project description and maps.
20. Clean Water Act Annual Reports for ACOE (as needed)	15 Nov (calendar year reports)
21. Project Specific Wetland Delineation Report(s) (as needed)	Within 30 days of completion of field work
22. Field Reports from <i>Regulatory Compliance</i> activity	Within 15 days of site visits
23. Summary of Site Inspections (as needed)	01 Oct
24. Quarterly Tracking Spreadsheet (list of meetings & trainings attended)	05 Dec (Sept-Nov reporting) 05 Mar (Dec-Feb reporting) 05 Jun (Mar-May reporting) 05 Sep (Jun-Aug reporting)
25. New Training Materials (as needed)	Within 30 days of completion and/or 15 July
26. Updated Annual GIS geodatabase	01 Oct (covers annual technical POP of 1 Sept-31 Aug)

3.4 MGT, HABITAT - OPTION

POST FIRE ECOLOGICAL SURVEY & RESTORATION

Complete a post-fire analysis for prescribed fires and, when requested, complete a post-fire analysis for wildfires that are so severe that habitat could not be restored without human intervention. Post-fire analyses will focus on affects to natural and cultural resources. Provide needed support to AFCECs Wildland Fire Support Module. Activities may include but are not limited to the following activities and INRMP projects.

- Conduct pre- and post-habitat assessments and monitoring for AFCEC Wildland Fire Support Module prescribed fire activities and prepare Annual Pre/Post-Fire Report.
- Types of post-fire restoration work include follow-up treatments on previous wildland fires, invasive plant, or erosion control to reduce immediate and/or long-term damage, re-contouring of wetlands, and native restoration plantings, and restoration of vernal pool species habitat.
- Restoration plans should include but not be limited to, quantitative evaluations for aquatic invertebrates. Type of restoration is site dependent. Note that weed or erosion control measures may need to be implemented prior to the wet season as early as August.
- Implement recommendations from post-fire reports to minimize the effects of prescribed and/or wildland fire to important natural resources (listed species,

species of concern, wetlands, rare and native plants, water quality, cultural resources, etc.) and prepare Annual Post-Fire Implementation Report.

PROJECT 6.3.6. Develop prescribed burn projects with wildland fire management to control invasive plants and manage native plant communities.

PROJECT 1.2.1. Develop prescribed burn wildlife habitat priorities and coordinate with Wildland Fire Management Program.

Professional Requirements. The NFE is to provide a qualified biologist with experience with California species including ability to identify all special status flora and fauna that could occur on Travis AFB and is permitted to conduct listed species surveys including listed crustaceans. At least one qualified person to have at least three years of GIS data management experience plus relevant education in GIS.

Meetings: Attend monthly task order coordination meetings (up to 12/yr.). Attend Wildland Fire project coordination meetings, as needed. Attend base meetings related to wildfires and prescribed burns. AFCEC Travis ISS must approve attendance at other meetings to ensure work schedule is on time.

Level of Effort: Expect approximately **150** hours of field effort and reporting annually. Project management and ODCs are in addition to this effort. Each year, conduct follow-up activities to previous years' work and/or conduct work in new areas. An alternate workspace off, but near, the installation may be utilized. For this project, NFE can telework on days when they do not have scheduled in-person meetings or site visits.

Outreach / Education / Training: Prepare pamphlets and fliers as requested to help educate base residents and the public about prescribed fire and the use of fire as an important natural resources management tool. Provide training to base personnel as requested including firebreak training for Fire Department, Horizontal shop, etc. (2 trainings per PoP). No NFE training anticipated (see Qualifications Section 4.0).

Materials, Supplies, & Equipment: Provide all materials required to conduct work including any material required to complete invasive species or erosion control, vegetation surveys, and species sampling.

Resource Management Outcomes: Assess fire (wild or prescribed) impacts to natural resources, report on those effects and any associated management opportunities, and perform control and maintenance activities to address adverse effects and/or conduct restoration to capitalize on opportunities provided by fire. Resource outcomes include healthier annual grasslands that provide improved habitat for federally listed species and compliance with ESA and CWA.

Deliverables (see Section 9.0 also): Draft (MS word; .docx) and Final version required in .pdf with responses to government comments (if provided). Plan for government review period not to exceed (NTE) 30 days. Government comments provided in tracked changes or comment matrix.

Deliverables	Due Date
27. Annual Pre/Post-Fire Reports	Within 15 days of post-fire survey and at least 30 days prior to the onset of the wet season
28. Annual Post-Fire Implementation Reports	01 Oct
29. Fire Training Materials (as needed)	Within 30 days of completion and/or 15 July
30. Updated Annual GIS geodatabase	01 Oct (covers annual technical POP of 1 Sept-31 Aug)

3.5 MGT, SPECIES - OPTION

3.5.1 - SENSITIVE SPECIES MANAGEMENT

Complete non-migratory bird sensitive species management activities to support INRMP goals and objectives. Activities may include, but are not limited to:

- Monitor each state listed and other special status species (e.g., non-listed bats,) as required under law or agreement and for every project that may impact state listed species.
- Conduct assessment to determine threats to known populations. Implement steps to protect species, if necessary, to preserve populations.
- Make annual efforts to implement survey and monitoring needs for at-risk species as outlined in *INRMP Section 7.1.1 Fish and Wildlife Management and 7.1.1.4 Bat Management*.

Task may also implement the following Travis INRMP (2022) projects and other INRMP projects as added or amended during the INRMP Annual Review process:

PROJECT 1.3.1. Conduct periodic wildlife surveys to update the comprehensive base species list, including GSUs, according to vegetation types and update GIS accordingly with results.

- Some baseline surveys have been completed and these would be updated every 5 years. The INRMP comprehensive list should be updated with any new species that are detected while doing other ESA surveys.

Bat surveys and monitoring, including for the Western mastiff bat, Pallid bat, Townsend's big-eared bat:

- Conduct annual general acoustic monitoring at previously established points, following the NABat protocol in the summer; organize and submit data to the North American Bat Monitoring Program (NABat). Depending on fundings and recommendations, consider adding additional monitoring points, or increasing the frequency of monitoring at the established points.

PROJECT 1.3.4. Conduct fish surveys of Union Creek, North Gate Pond, Valley View Pond, and other perennial ponds on Travis AFB. FOLLOW-ON PERIOD 2

PROJECT 1.3.6. Continually, or at a minimum annually, update and maintain the GIS database with survey results on native fish and wildlife.

PROJECT 2.2.3. Review federal and California state species, and the California State Wildlife Action Plan for newly listed or proposed species. Produce Travis AFB management goals for protection and recovery.

PROJECT 5.1.2. Train NRM staff in the use of ArcGIS software and GIS data collection.

PROJECT 5.2.1. Publish articles in the Travis AFB newspaper, post on the base website and produce fliers for outreach events to educate the public on how to respond to wildlife encounters or conflicts with pests or potentially dangerous wildlife species (e.g., rattlesnakes, skunks, coyotes).

PROJECT 5.2.2. Provide educational material to base residents, personnel, retirees, and recreational users about the effects of releasing nonnative plants and animals (e.g., turtles, frogs, salamanders, and fish) on native aquatic and terrestrial ecosystems with support from the Public Affairs Office.

PROJECT 5.2.4. Develop and implement a water conservation education program to minimize the use of water in land management activities, especially irrigation of landscaped areas.

PROJECT 5.4.1. Produce and publicize the Integrated natural Resources Management Plan by providing both hard copy versions and electronic access.

PROJECT 5.4.3. Streamline and standardize environmental review process for mission projects.

PROJECT 5.4.4. Maintain hard copy and electronic records as specified in Section 6.1. Refer to Section 6.1 in the 2022 Travis INRMP for more information.

The following Natural Resources records to be maintained:

Hard Copy and Electronic

Biological Monitoring and Survey Reports

Construction Project Status Tracking

Compensatory Mitigation

Monitoring of Biological Opinions

Monitoring CWA Permits

Costs paid by construction contracts for T&E species monitoring and project mitigation compensation)

PROJECT 6.2.5. If time allows schedule, advertise, and conduct guided tours of important natural resource management units/areas for the general base populace, local schools and interested public and local agencies.

PROJECT 6.2.7. Develop natural resource education partnerships with external community groups with expertise in natural resource conservation to assist with the education program in natural resource areas with support of the Public Affairs Office.

Professional Requirements. Provide a qualified biologist with experience with California species, including those in this subtask. Finally, provide a biologist able to learn and train effectively in those tasks to which they are previously unfamiliar. At least one qualified person to have at least three years of GIS data management experience plus relevant education in GIS.

Meetings: Attend monthly task order coordination meetings (up to 12/yr.). Attend base meetings related to non-migratory bird sensitive species. AFCEC Travis ISS must approve attendance at other meetings to ensure work schedule is on time.

Level of Effort: Expect approximately **250** hours of field effort and reporting annually by a biologist who is qualified to identify all special status and federally listed species and habitats that could occur on Travis AFB. Project management and ODCs are in addition to this effort. Each year, conduct follow-up activities to previous years' work and/or conduct work in new areas. An alternate workspace off, but near, the installation may be utilized. For this project, NFE can telework on days when they do not have scheduled in-person meetings or survey/site visits.

Outreach / Education / Training: Prepare pamphlets and fliers as requested to help educate base residents and the public about non-migratory bird and sensitive species. Provide training to base personnel as requested. No NFE training anticipated (see Qualifications Section 4.0).

Materials, Supplies, & Equipment: Provide all materials required to conduct work.

Resource Management Outcomes: Monitor occurrences of non-migratory bird and sensitive species to inform conservation measures for construction projects and BASH activities around the airfield. Identify any special status species issues and recommend follow up actions. Each year, conduct follow-up activities to previous years' work and/or conduct work in new areas.

Deliverables (see Section 9.0 also): Draft (MS word; .docx) and Final version required in .pdf with responses to government comments (if provided). Plan for government review period not to exceed (NTE) 30 days. Government comments provided in tracked changes or comment matrix.

Deliverables	Due Date
31. Annual Action Plan	15 Nov (prior to start of field work)

32. Annual Activity Report	01 Oct (end of task order)
33. Updated Annual GIS geodatabase	01 Oct (covers annual technical POP of 1 Sept-31 Aug)

3.5.2 - MIGRATORY BIRD MANAGEMENT

Complete migratory bird management activities to support INRMP goals and objectives. Implement Avian Protection Plan. Activities may include, but are not limited to the following:

Monitor/survey for each state listed migratory bird (e.g., Swainson’s hawk, Tricolored blackbird, etc.) as required under law or agreement and for every project that may impact state listed species.

Task may also implement the following Travis INRMP (2022) projects and other INRMP projects as added or amended during the INRMP Annual Review process:

PROJECT 1.1.1. Ensure all Bird/Wildlife Aircraft Strike Hazard (BASH) U.S. Department of Agriculture (USDA) activities conducted near the Airfield are in accordance with the U.S. Fish and Wildlife Service (USFWS) Depredation Permit, and in coordination with California Department of Fish and Wildlife (CDFW) and Flight Safety (AFI 91-212).

PROJECT 1.1.2. Study and implement management and restoration activities to reduce conflicts between wildlife species of concern and runway flight operations in coordination with the BASH plan (e.g., Tricolored Blackbirds, new grazing pastures with bird attractants near airfield).

PROJECT 1.1.3. Implement the Avian Protection Plan to monitor risks to birds on all power lines, transmitter towers, and associated electrical configurations on Travis AFB (in coordination with Civil Engineering, Pacific Gas & Electric, and City Light & Power and other providers) for needed retrofits and new construction with databases and/or a geographic information system (GIS) to track changes.

- Monitor avian deaths through coordination with the Pest Shop. Complete Avian Mortality Reports for tracking of problem utility poles.
- Coordinate with 60 CES/CEN Project Manager for City Light & Power (owner of power poles on Travis AFB, except housing area) to implement the Avian Protection Plan (APP) for poles needing retrofit.
- Coordinate APP training for base Electric Shop, and City Light & Power staff at least once every 2 years.
- Annually, update the APP GIS for poles that have been retrofitted.

PROJECT 1.1.4. Manage for raptors and owls through habitat surveys, educational outreach, and pre-construction training.

PROJECT 1.2.4. Plan and implement habitat improvements for raptors and owls in conservation areas and other suitable areas on the base.

PROJECT 1.3.2. Conduct neotropical migratory bird monitoring as part of the Partners in Flight monitoring program to determine species status in various ecosystems on the base. FOLLOW-ON PERIOD 3

- FOLLOW-ON PERIOD 3: Conduct neotropical migratory bird monitoring base wide with a focus in Base Conservation Areas.
 - Focus on the following special status species to assess population trends, habitat use and quality as well as potential measures to enhance habitat or encourage use in areas where they don't constitute a BASH hazard:
 - burrowing owl (wintering and nesting)
 - golden eagle
 - tricolored blackbird
 - white-tailed kite
 - Swanson's hawk
 - Summarize all special-status bird occurrences, including nesting locations, from past surveys with data collected under this Sub Task into a final report discussing trends and management recommendations.

PROJECT 1.3.3. Conduct surveys for owls and raptors. FOLLOW-ON PERIOD 3

PROJECT 1.3.7 Contribute species survey and occurrence data to federal, and other installation approved scientific databases, such as the Avian Knowledge Network (AKN), North American Bat Monitoring Program (NABat), and/or California Natural Diversity Database (CNDDDB).

PROJECT 2.1.5. Conduct surveys for Birds of Conservation Concern (BCC) (USFWS 2008), and federal and state threatened and endangered (T&E) bird species, specifically including Golden Eagles, Swainson's Hawks, Tricolored Blackbirds, Western Burrowing Owls and White-tailed Kites on the base to assess population trends, habitat use and quality, and potential measures to enhance their habitat and reduce species presence in areas where the species would constitute a BASH threat. FOLLOW-ON PERIODS 2 & 4

PROJECT 2.1.6. Implement the Burrowing Owl Management Plan and its recommendations including to consider installation of artificial burrows in conservation areas.

- Artificial burrow system (ABS) monitoring and maintenance. Two ABS's were installed on Travis in 2022. Monitoring and maintenance of the ABSs every year may include purchasing and installing landscaping materials, river rock, and perching substrate. Maintenance activities are to be conducted to ensure ABSs continue to serve resident BUOW population, including vegetation clearing to maintain access to the burrows. BASE YEAR & ALL FOLLOW-ON PERIODS

PROJECT 5.1.4. Provide an updated training to the Base Electric Shop, Electrical Engineers, and Electrical System Lessee at least once every two years in accordance with the Avian Protection Plan. FOLLOW-ON PERIODS 1 & 3

PROJECT 5.4.2. Produce electronic and hard copy document for base procedures regarding nesting birds to comply with the Migratory Bird Treaty Act.

Professional Requirements. NFE to provide a qualified biologist with experience in identification and management of California avian species, including those species in this subtask. Finally, provide a biologist able to learn and train effectively in those tasks to which they are previously unfamiliar. At least one qualified person to have at least three years of GIS data management experience plus relevant education in GIS.

Meetings: Attend monthly task order coordination meetings (up to 12/yr.). Attend base meetings related to migratory birds. AFCEC Travis ISS must approve attendance at other meetings to ensure work schedule is on time.

Level of Effort: NFE should assume up to **180** hours biological support and technical tasks, part-time to maintain compliance with the Migratory Bird Treaty Act and INRMP Goals and Objectives. Project management and ODCs are in addition to this effort. Each year, conduct follow-up activities to previous years' work and/or conduct work in new areas. Effort is seasonal and based on avian activity scheduled, primarily in the spring and early summer. Some activity is required year-round. An alternate workspace off, but near, the installation may be utilized. For this project, NFE can telework on days when they do not have scheduled in-person meetings or survey/site visits.

Outreach / Education / Training: Prepare pamphlets and fliers, as requested, to help educate base residents, applicable base operations and electrical personnel, and the public about migratory bird management strategies and requirements. Provide training to base personnel as requested. No NFE training anticipated (see Qualifications Section 4.0).

Materials, Supplies, & Equipment: Provide all materials required to conduct work.

Resource Management Outcomes: Monitor occurrences of special status and other migratory birds to inform conservation measures for construction projects and BASH activities around the airfield. Identify any special status bird species issues and recommend follow up actions. Each year, conduct follow-up activities to previous years' work and/or conduct work in new areas. Desired outcome is to 1) improve compliance with Migratory Bird Treaty Act, and 2) improve management of migratory birds on Travis AFB.

Deliverables (see Section 9.0 also): Draft (MS word; .docx) and Final version required in .pdf with responses to government comments (if provided). Plan for government review period not to exceed (NTE) 30 days. Government comments provided in tracked changes or comment matrix.

Deliverables	Due Date
34. Annual Action Plan	15 Nov (prior to start of field work)
35. Annual Activity Report	01 Oct (end of task order)
36. Quarterly Tracking Spreadsheet (list of meetings & trainings attended)	05 Dec (Sept-Nov reporting) 05 Mar (Dec-Feb reporting) 05 Jun (Mar-May reporting) 05 Sep (Jun-Aug reporting)
37. New Training Materials (as needed)	Within 30 days of completion and/or 15 July
38. Updated Annual GIS geodatabase	01 Oct (covers annual technical POP of 1 Sept-31 Aug)

3.6 MGT, INVASIVE SPECIES - OPTION

3.6.1 - Invasive Species Management

Control the presence and spread of invasive species with follow-up treatments to previous year’s work, and survey, monitoring, and Early Detection and Rapid Response (EDRR) as described the Travis Invasive Species Management Plan (2024). Areas for treatment in **FY24-28** include, at minimum, the Conservation Areas (Castle Terrace (north and south), Hangar Goldfields, and Aero Club), and the southeast undeveloped area. Focal species include, at minimum, barbed goat grass, stinkwort, perennial pepper weed, skeleton weed, medusahead, yellow/purple star thistle. Weed management at all sites should take into consideration the importance of the targeted weed species as a food resource for the focal species of bees and butterflies. Monitoring, data and geodatabase management, and reporting are key pieces of this project to ensure success of the program. Follow conservation measures as outlined in the GMP, ISMP, and Travis AFB Programmatic Biological Assessment (PBA) at all times. Confirm all applicable permits are in place before proceeding with activity (NEPA, Section 7, TRIRIGA Service Request, Base Work Clearance, and Clean Water Act (CWA)). If permits are not in place, NFE may work to finalize these documents.

Task may also implement the following Travis INRMP (2022) projects and other INRMP projects as added or amended during the INRMP Annual Review process:

PROJECT 1.2.2. Identify and prioritize projects according to the Invasive Species Management Plan in conjunction with Agricultural Out leasing and Wildland Fire Management Program.

PROJECT 4.2.5. Ensure all invasive species treatment projects include plans to remove residual invasive plant material and restore area with native plants and weed free certified soil.

PROJECT 4.2.6. Develop strategy to set priority areas for habitat restoration in improved, semi-improved and unimproved landscapes and then conduct restoration and reduction of weed infestation according to priority level.

PROJECT 4.2.7. Conduct restoration in areas already treated with herbicide to allow for faster habitat recovery.

PROJECT 4.2.8. Evaluate measurable objectives for each area on Travis AFB in the Invasive Species Management Plan in reducing, controlling, and eliminating invasive species and revise when necessary to maintain relevancy and incorporate new science.

PROJECT 4.3.2. Implement the Travis AFB Biosecurity Plan through recurring training for all personnel involved in the movement of cargo.

PROJECT 5.2.3. Increase awareness of base residents, personnel, and retirees regarding proper management of native vegetation and the need to avoid the introduction and spread of non-native plant species.

PROJECT 6.4.4. Investigate options and benefits of establishing permanent goat/sheep on the installation for continuous fuel reduction in wildfire vulnerable areas; includes establishing a full time shepherd, goat/sheep herds in a self-sustainable effort Research and conduct a feasibility study (includes analysis of effects) that includes an assessment of potential impacts to special-status species from grazing practices and associated facilities in year 1 and/or 2. Year 2 and/or 3, establish design. Year 3 and/or up to 6 years to implement the project.

- Research and conduct a feasibility study to investigate the funding required to establish and perpetually maintain a goat or sheep herd on TAFB property. The herd would be used for on-demand grazing for fuel reduction in wildfire vulnerable areas, management of invasive species and threatened and endangered species habitat. The purpose of the feasibility study is to provide information for decision making by TAFB leadership. The study should include the potential impacts to TAFB special-status species from goat/sheep grazing practices, identification of personnel and facilities required, as well as a detailed breakdown of costs and associated funding.

Specific tasks to be accomplished:

- Prepare feasibility study report that includes a review of industry standards related to the operations and maintenance, detailed forecast of annual funding levels required to sustain a herd, identification of staff expertise required to successfully operate and maintain grazing operations, potential obstacles to establishing and maintaining a permanent sheep herd on the Base, and analysis

of potential effects on TAFB natural resources. At a minimum the report should include the following elements:

- Initial costs: purchase of sheep, full time shepherd, equipment, vehicles, machinery
- Annual costs: feed, water, energy, medical, maintenance of housing, equipment, and vehicles,
- Size of herd: sheep per acre needed to manage fire prone areas of the Base.
- Detailed description of required permanent and temporary facilities: siting, description and size of facility, space requirements for improvements, space requirements for animals, other requirements needed to maintain health and safety of herd.
- Management of operation: security, onsite shepherd housing, guard dog, shearing flock
- ESA analysis effects to threatened and endangered species of the footprint of the permanent and temporary facilities and any ingress/egress for access to permanent and temporary facilities

Professional Requirements.

NFE to provide a qualified biologist with experience with California's invasive species, control techniques (mechanical and chemical). **At least one project biologist shall hold and maintain state certifications to apply herbicides.** Finally, provide a biologist able to learn and train effectively in those tasks to which they are previously unfamiliar.

Feasibility Study Report: NFE to provide qualified biologist with experience with California species (flora and fauna) and preparing Section 7 ESA analysis of effects of the project on the threatened and endangered species on TAFB. At least one qualified person to have at least three years of GIS data management experience plus relevant education in GIS.

Meetings: Attend monthly task order coordination meetings (up to 12/yr.).

Level of Effort: Expect approximately **1200** hours of field effort and reporting per PoP. Project management and ODCs are in addition to this effort. **At least one project biologist shall hold and maintain state certifications to apply herbicides.** Each year, conduct follow-up activities to previous years' work and/or conduct work in new areas. An alternate workspace off, but near, the installation may be utilized. For this project, NFE can telework on days when they do not have scheduled in-person meetings or site visits.

Outreach/Education/Training: Prepare pamphlets/fliers as requested to help educate base residents and the public on invasive species ecological impacts and weed control. Provide training to base personnel as requested (up to 2/PoP). NFE may attend training (up to 40 hours/PoP) related to invasive species control, ecological impacts of weeds,

and/or, for training purposes, accompany other contractors that are conducting relevant invasive species fieldwork.

Materials, Supplies, and Equipment: Provide all materials, supplies, and equipment required to conduct work.

Resource Management Outcomes: Resource management outcomes include healthier annual grasslands that provide improved habitat for federally listed species and a reduction of wildfire occurrences on the Base. Monitor occurrences of target invasive species to inform management decisions. Identify new research and techniques in the management of invasive species to further adaptive management goals and recommend follow up actions. Each year, conduct follow-up activities to previous years' work and/or conduct work in new areas.

Deliverables (see Section 9.0 also): Draft (MS word; .docx) and Final version required in .pdf with responses to government comments (if provided). Plan for government review period not to exceed (NTE) 30 days. Government comments provided in tracked changes or comment matrix.

Deliverables	Due Date
39. Invasive Species Management	
a. Annual Monitoring Work Plan	15 Nov (prior to start of field work)
c. Annual Monitoring Report	01 Oct (end of task order)
40. Feasibility Study Report	01 Oct (end of task order)
41. Updated Annual GIS geodatabase	01 Oct (covers annual technical POP of 1 Sept-31 Aug)

3.6.2 - Grassland Management

Travis has 360 acres of horse and cattle grazing pastures. Perform rangeland monitoring activities within grazed pastures. Methods should follow the Monitoring Methodology for the TAFB Grazing Management Plan (HT Harvey, May 2018), the Vernal Pool Grassland Grazing Study at TAFB (Marty, July 2017), and the Grazing Management Plan (Hopkinson, 2017). Work includes compliance and effectiveness monitoring within grazing pastures 1-10 and 14-20, control plots located in adjacent grasslands, and any new pastures. Data collection efforts include livestock counts, spring biomass production, peak standing crop forage production, fall RDM, photo points, bare ground cover, dominant plant presence, native and non-native plant cover, RDM mapping, grass height, and small mammal burrow density. Data from invasive species mapping effort is available for review/analysis in addition to the Vernal Pool Grassland Grazing Study. Additional parameters or monitoring points may be required depending on results of the prior year and or adaptive management actions that require monitoring. Activities may include, but are not limited to the following activities and INRMP projects:

PROJECT 6.3.1. Implement a grazing monitoring program that evaluates and measures grazing impacts on the vernal pools and associated grasslands within grazed areas. Requirement: BO 1-1-99-F-84. BASE YEAR & ALL FOLLOW-ON PERIODS

- Compliance Grazing Monitoring Ensures compliance with Grazing Land Use Rules, monitors RDM and species composition/cover, and identifies issues with grazing operations, recommending solutions for use in an adaptive management framework. Monitoring aims to collect baseline information and then measure success of any adaptive management strategies.
- Repair grazing fence when within capabilities of NFE. Report to NRM when items can no longer wait.
- Monitor and record water trough water usage monthly in all pastures.
- Assist the Travis NR Manager, when requested, in preparation for and attendance during quarterly meeting discussions with Grazing lessee.

PROJECT 6.3.3. Describe current conditions of plant composition in grazing units and monitor landscape vegetation trends using photographic analysis and provide any GIS data collected to be incorporated into Travis GIS database.

PROJECT 6.3.7. Evaluate monitoring protocol to target updated goals and objectives in the Grazing Management Plan.

Professional Requirements. NFE to provide a qualified biologist with experience in California rangeland management, California plant identification, and at least 3 years of biological experience. Provide, at minimum, a Project Manager for this project who is a Certified Rangeland Manager (California-Pacific Society of Range Management). At least one qualified person to have at least three years of GIS data management experience plus relevant education in GIS.

Meetings: Attend monthly task order coordination meetings (up to 12/yr.). AFCEC Travis ISS must approve attendance at other meetings to ensure work schedule is on time.

Level of Effort: Approximately **200** hours of field effort and reporting is expected per POP. Project management and ODCs are in addition to this effort. Effort is seasonal and variable based on target species. Each year, conduct follow-up activities to previous years' work and/or conduct work in new areas. An alternate workspace off, but near, the installation may be utilized. For this project, NFE can telework on days when they do not have scheduled in-person meetings or site visits.

Outreach / Education / Training: Prepare pamphlets/fliers as requested to help educate base residents, Equestrian Center, and the public on sensitive species issues. Provide training to base personnel as requested (up to 2/PoP). No NFE training anticipated. (See Qualifications Section 4.0).

Materials, Supplies, and Equipment: Provide all materials, supplies, and equipment required to conduct work.

Resource Management Outcomes: Monitor grazing operations and their compliance with the Grazing Land Use Rules. Monitor grazing pastures to document baseline conditions and response from adaptive management activities, if implemented. Identify invasive species issues and recommend grazing prescriptions as appropriate. Each year, conduct follow-up activities to previous years’ work and/or conduct work in new areas.

Deliverables (see Section 9.0 also): Draft (MS word; .docx) and Final version required in .pdf with responses to government comments (if provided). Plan for government review period not to exceed (NTE) 30 days. Government comments provided in tracked changes or comment matrix.

Deliverables	Due Date
42. Grazing Management	
a. Work Plan	15 Sept (prior to start of field work)
b. Annual Monitoring Report	15 Oct (end of task order)
43. Updated Annual GIS geodatabase	01 Oct (covers annual technical POP of 1 Sept-31 Aug)

4.0 QUALIFICATIONS

- 4.1 For tasks requiring invasive species control, a project manager and field staff should have prior experience with problematic Central Valley weeds, state licenses for herbicide application, and professional and educational experience related to invasive species control and habitat restoration. Prior experience avoiding impacts to federally listed species is also required.
- 4.2 For tasks that require sensitive species or migratory bird surveys, field staff should have prior experience with Central Valley species and appropriate survey protocols.
- 4.3 For tasks that require fieldwork for federally listed species, field staff are to have prior experience conducting surveys for listed species. Where work may affect a species, field staff are to have pre-existing 10a1A permits.
- 4.4 For tasks that require hydrological analysis, field staff are to have prior experience surveying hydrology of complex vernal pool systems in California using level logger/piezometer technologies.
- 4.5 For tasks that require wetland verification, individuals require prior experience and advanced expertise and training in wetland delineation protocols.

- 4.6 For tasks monitoring grazing compliance, personnel or project manager are to be Certified Rangeland Manager (California-Pacific Society for Range Management).
- 4.7 **HERBICIDE APPLICATION REQUIREMENTS:** Provide all labor, tools, equipment, test equipment, personal protective equipment and clothing, material and parts, transportation, and other incidentals necessary to implement herbicide application.
- 4.7.1 All herbicides and herbicide application are to comply with Department of Defense Instruction (DoDI) 4150.07 DoD Pest Management Program; AFI 32-1053 Integrated Pest Management Program; the Integrated Pest Management Plan for Travis AFB; Armed Forces Pest Management Board (AFPMB) list of Approved herbicides; and the State of California Pesticide Regulations and be registered for use in the State of California. Only pesticides approved for use on the applicable base may be applied.
 - 4.7.2 A list of those herbicides requested to be used must be submitted to the AFCEC no later than (NLT) thirty (30) calendar days after agreement is signed and must be coordinated through the HazMart at the applicable Base. A list of all herbicides to be applied is to be provided, with Safety Data Sheet (SDS) and labels, to the IPMC fifteen (15) calendar days prior to application. If non-approved herbicide is preferred, the NFE is to submit an AF Approval Request Form for Non-Standard Pesticides to the IPMC thirty (30) calendar days prior to application. Any non-standard herbicides need to have AFCEC Command Entomologist approval prior to use and requires a longer approval period.
 - 4.7.3 Only personnel licensed/certified by the State of California are to apply herbicides. Copies of all herbicide application certifications are to be provided to the AFCEC and IPMC on the applicable base within 30 calendar days. All licenses/certifications must be in the proper category of the type of work being performed. Qualified Applicator Certificate, Qualified Applicator License, and Pest Control business license copies are to be provided.
 - 4.7.4 Before any herbicide application is to begin, a Work Request is to be staffed through the Base Work Order system or TRIRIGA by CES/CEIEC and to the IPMC for approval. It includes the pest to be controlled (grass and weed control), a map identifying the location pesticides are to be applied, the number of acres of application, the pesticides to be applied, and copies of the SDS. The Work Request should be comprehensive of total effort thus only one would be done per year under this agreement.
 - 4.7.5 Pesticide Mixing, Storage and Disposal: All pesticides are to be stored off-base. All unused pesticides, empty pesticide containers

and residue are to be disposed of properly at an approved off-base disposal area. **Chemical mixing for immediate application may be accomplished at the site of application/treatment and only state certified applicators may mix or apply pesticides.** Provide a spill container at mixing areas to ensure that no chemicals impact an area that is not being treated. The NFE/Sub-NFE is to have an operational emergency eyewash kit available at each mixing location. In the event the NFE/Sub-NFE spills or releases any hazardous substances (example, substances listed in 40 Code of Federal Regulations (CFR) 302), the NFE/Sub-NFE is to immediately notify the Fire Department, AFCEC PM, CES/CEIEC, and IPMC.

- 4.7.6 Safety: The NFE/Sub-NFE is to comply with all applicable parts of Title 29 CFR, *Occupational Safety and Health Standards*, Part 1910; Title 29, CFR, *Safety and Health Standards for Federal Service Contracts*, Part 1925; Title 40, CFR, Parts 150-189, and Title 49, CFR, *Hazardous Materials Regulations*, Part 171, while on an AF installation, to ensure safe working conditions for NFE/Sub-NFE personnel and a safe environment for the occupants of AF facilities.
- 4.7.7 The NFE/Sub-NFE is to establish an AF Integrated Pest Management Information System (IPMIS) account to enter and document state pesticide applicator certification categories and expiration dates.
- 4.7.8 Provide pesticide use data to the IPMC monthly (not later than 10 days after close of month) for input into the IPMIS pesticide management database.
- 4.7.9 Following award, the NFE may submit reports and certifications to Travis IPMC and include a cc to: Travis Natural Resources Manager (Ms. Emily Perea emily.perea@us.af.mil)

5.0 GOVERNMENT FURNISHED MATERIALS OR PROPERTY

- 5.1 PHYSICAL DATA: Prior weed control and post-fire restoration reporting. Applicable GIS information for natural resources and base boundary and roads files.
- 5.2 FACILITY: Office support for three personnel at Travis AFB, including, but not limited to the following: computers, pertinent software, network access, internet access, email, word processing, database, telephone support. One physical office with a government telephone is to be available in the Travis Civil Engineer Squadron, Environmental Office, 411 Airmen, Travis AFB, CA. Two physical offices are available at the AFCEC Travis ISS Environmental Office, 550 Hickam Ave, Travis AFB, CA, or the

NFE may choose to use an alternate workspace off-installation, but near, the installation.

- 5.3 Travel to seminars, State agencies, or meeting locations are typically not to exceed 5 hours driving time one way. NFE's employees are required to obtain all Government certificates, licenses, and qualifications required to drive a GOV. The NFE is to assist in the caring for and maintaining of all GOVs they operate that are assigned to the 60 CES/CEIE. GOV abuse and misuse is not tolerated. All traffic violations or accidents incurred by the NFE or its employees to be resolved by the NFE. An individual's loss of their state driver's license may result in 60 CES/CEIE request for termination of this individual if the individual cannot perform his or her daily tasks without means of transportation. Damages resulting from accidents incurred by the NFE's employee, if negligent, is to be covered by the NFE's self-insured general liability insurance. If the NFE's employee is not negligent, the Federal employer is responsible for the damages to the GOV.
- 5.4 EQUIPMENT, BADGE, KEYS AND/OR FACILITIES PROVIDED. All support personnel in this SOO require issuance of a Common Access Card (CAC). CACs are issued IAW FAR 5352.242.9001 (CACs for Contractor Personnel Homeland Security Presidential Directive 12, dated 27 August 2004) promulgated a federal standard for secure and reliable forms of identification for Federal employees and Contractors. That identification is the CAC. The Government provides contractor personnel with an office environment typically provided to Government personnel that includes workstations, facsimile, telephones, copiers, and computers with access to relevant software, to the Internet and to the local area network (LAN). The Government provides contractor personnel with an identification badge (or other unique form of identification) upon successful completion of a Federal investigative process as required IAW Homeland Security Presidential Directive-12 (HSPD-12) or, in the event of a waiver; an "interim" badge may be issued.
- 5.5 RESTRICTED AREA BADGE: All support personnel in this SOO require a Restricted Area Badge (RAB) when working on tasks that require access to restricted areas. RAB procedures require issuance to contractors when needed. Support personnel need the RAB to avoid delays encountered waiting for an escort due to time-sensitive schedule requirements. Support personnel frequently conduct site visits in restricted areas to assess the risk to federally listed species from proposed mission projects, particularly along the ramps where aircraft park. The need is ongoing due to planned runway projects and seasonal crossings of California tiger salamander across the runways.
- 5.6 EQUIPMENT: Requires at least one (1) NFE-provided laptop and one (1) tablet with data plan to support fieldwork and travel. Government DOES NOT supply GIS equipment. NFE to supply all GIS/GPS equipment and software

(including ArcMap licensing) needed to accomplish the fieldwork and manage GIS data for all above Tasks.

5.7 Government furnished materials or property is governed by 2 C.F.R. Part 200.312, which states that a) Title to federally owned property remains, vested in the Federal government. The non-Federal entity must submit annually an inventory listing of federally owned property in its custody to the Federal awarding agency. Upon completion of the Federal award or when the property is no longer needed, the non-Federal entity must return the property to the Federal awarding agency for further Federal agency utilization.

6.0 PERIOD OF PERFORMANCE (PoP)

Base Period: 18-months from date of award (*3 months administrative period to complete on-boarding of employees and subcontractors, 12-month technical period for conducting field work, 3 months administrative for completion of reports only with no new work*)

7.0 FOLLOW-ON PERIODS

Four (4) 18-month Follow-On (FO) periods. Any overlap between base and follow-on periods is to accommodate on-boarding of personnel, subcontracting activities, and reporting activities as field work is required during all 12 months of the technical period of performance.

8.0 COORDINATION

USACE POC
David Leptien, PM
402-889-5570
david.b.leptien@usace.army.mil

AFCEC Travis Installation Support Section,
Natural Resources Lead, AFCEC/CZOW
Primary: Deanne Weber,
707-424-8627,
deanne.weber.1@us.af.mil
Alternate: Kirsten Christopherson,
707-424-8622,
kirsten.christopherson@us.af.mil

Travis Air Force Base,
Natural Resources Manager, 60 CES/CEIEC
Emily Perea,
707-424-2532,

9.0 DELIVERABLES

- 9.1 Progress Reports - One (1) typed letter report describing progress on the project. The report is due as of the last day of the third month (**quarterly**) and is to be transmitted via electronic mail, facsimile, or regular mail no later than the 10th calendar day following the end of the reporting period. Invoices for partial payment are to be submitted to coincide with receipt of the quarterly progress reports. No partial payment approved unless the government has received all progress reports which are due.
- 9.2 Monthly Progress Agenda, Reports & Meeting Minutes - One (1) typed report describing progress on the project, due two days before the scheduled monthly meeting and transmitted via electronic mail. Meeting minutes are due within 2 days following the monthly meeting to include a summary of action items.
- 9.3 Annual Inventory – Federally owned property - an annual inventory listing Federal property (to include description of the property, a serial number or other identification number) that is in the custody of the recipient; Copies to be sent to USACE – SWF and the Travis AFB and AFCEC/CZOW Natural Resource Managers.
- 9.4 Annual Inventory – Acquired Property - purchased with funding from award - property records must be maintained that includes description of the property, serial number or other identification number, source of funding, who holds title, acquisition date, cost of property, percentage of Federal participation in project costs, location, use and condition of property, and ultimate disposition including date of disposal and sale price. A physical inventory must be taken, and results reconciled every two years. Copies of the inventory to be sent annually to USACE – SWF and the Travis AFB and AFCEC/CZOW Natural Resource Managers.
- 9.5 Draft Project Reports – See each task for task specific reports. Electronic copies of draft final reports should be submitted no later than one month before end of the project. **All draft deliverables are to be reviewed by an experienced editor to fix any editorial issues.** At a minimum, the reports are to contain the following information: executive summary, introduction, methods, results, discussion, management recommendations, raw data, updated NR GIS. Include raw data in draft and final reports. Each report to summarize work accomplished for the Task. Travis AFB and AFCEC Travis ISS staff to review and provide comments ***within 30 calendar days after receipt.***
- 9.6 Final Project Reports – See each task for task specific reports. **All final deliverables are to be reviewed by an experienced editor to fix any editorial issues.** Electronic copies of the final report, incorporating Travis AFB

and AFCEC Travis ISS review comments on the draft and are to be submitted no later than thirty (30) days after receipt of the Travis AFB and AFCEC Travis ISS comments.

9.7 Project Schedule and Work Plan – Provide an electronic copy of a work plan and project schedule in table format that includes all tasks. These are to be concise yet communicate what is to be performed and when. The schedule to include, at minimum, a break-down of the work into sections with associated timetables. Document is to be reviewed at the monthly meetings to ensure all work is on schedule.

9.8 GIS Deliverables – All tasks are to have at least one and likely several GIS deliverables that include all data layers used to create all maps within submitted deliverables. GIS deliverables are to include all new data collected throughout the course of the project. Draft GIS deliverables are to be submitted with draft reports that include their data, with final reports and GIS info submitted together. GIS deliverables must follow Air Force geospatial data standards, an adaptation of the SDSFIE 3.1x data model, as described in the data layer specifications (DLS)). Deliverables must comply with the latest version which are updated annually. All metadata associated with data layers must meet the Federal Geographic Data Committee (FGDC) Content Standard for Digital Geospatial Metadata (CSDGM) revised in June 1998. Metadata must also include all content stated in the metadata section of each layer’s DLS, which includes layer specific verbiage for attribute fields and definitions. Additional requirements include:

9.8.1 All submitted data must use at least one of the pre-defined 50 Natural Resource DLS listed below and most likely at least two. NFE is to review the complete list before field work begins to identify which layers are needed and identify them in the Annual Work Plan. Note that the collection of “negative” data is as important as “positive” data. Survey areas are a key part of the data set even if target species are not detected. [A =area, L = line, P = point.]

AgriculturalAndGrazingOutlease

9.8.1.1 CoastalZoneMgtArea_A

DispersedRecBoundary_A

9.8.1.2 EssentialFishHabitat_A

9.8.1.3 FaunaIncidentPoint_P

9.8.1.4 WildlandFire_A

9.8.1.5 FireBreakLine_L

9.8.1.6 Inundation_A

9.8.1.7 ForestCompartment_A

ForestManagementArea_A

9.8.1.8 ForestProductHarvest_A

ForestStand_A

- 9.8.1.9 HabitatDisturbance_A
- 9.8.1.10 HabitatProtectiveZone_A
- 9.8.1.11 HazardousSuppressionArea_A
- 9.8.1.12 HistoricRiverAlignment_L
- 9.8.1.13 HuntingFeature_P
- 9.8.1.14 LandCover_A
- 9.8.1.15 NatResRecFeature_P
- 9.8.1.16 NaturalResourceResRecProject_
- A
- 9.8.1.17 NaturalResourceResRecProject_
- P
- 9.8.1.18 NaturalResourceSurvey_A
- 9.8.1.19 NaturalResourceSurvey_L
- 9.8.1.20 NaturalResourceSurvey_P
- 9.8.1.21 NoxiousOrInvasiveSpecies_A
- 9.8.1.22 NoxiousOrInvasiveSpecies_L
- 9.8.1.23 NoxiousOrInvasiveSpecies_P
- 9.8.1.24 ObservationLookout_P
- 9.8.1.25 PrescribedBurnUnit_A
- 9.8.1.26 RecNatureTrailFeature_P
- 9.8.1.27 RecreationNatureTrail_L
- 9.8.1.28 RiparianArea_A
- 9.8.1.29 SoilMapUnit_A
- 9.8.1.30 SpecialManagementArea_A
- 9.8.1.31 SpecialStatusSpecies_A
- 9.8.1.32 SpecialStatusSpecies_L
- 9.8.1.33 SpecialStatusSpecies_P
- 9.8.1.34 SpeciesLocation_A
- 9.8.1.35 SpeciesLocation_P

SpeciesSpecificHabitat_A

- 9.8.1.36 SpeciesSpecificHabitat_L
- 9.8.1.37 SpeciesSpecificHabitat_P
- 9.8.1.38 SurfaceRiparianArea_A
- 9.8.1.39 Vegetation_A
- 9.8.1.40 WaterFeature_L
- 9.8.1.41 WaterFeature_P
- 9.8.1.42 Watershed_A
- 9.8.1.43 Wetland_A
- 9.8.1.44 Wetland_L
- 9.8.1.45 Wetland_P
- 9.8.1.46 WildlandUrbanInterfaceArea_A

9.8.1.47 WildlifeManagementArea_A
9.8.1.48 WildlifeManagementArea_P

An empty, SDSFIE 3.1x compliant ArcView geodatabase is available for use as is an excel data dictionary. Absolutely no changes may be made to the structure. All formatting and attributes must align with the current template to be accepted by the AF and transferred to the official geodatabase. NFE is to discuss any concerns with the Base Geodatabase Manager and Travis ISS before work begins to find workarounds where fields aren't available to collect needed data.

NFE to submit a geodatabase that includes only new data rows or existing data rows that have been changed so that they may easily be added to the official geodatabase.

NFE to populate all fields within the tables. All data should comply with the DLS which often includes tables of available choices for each field. An excel data dictionary is also available.

NFE to identify data errors for any DLS that they use and submit them with the final deliverables so that the AFCEC Travis ISS may work to change them in the next standards update. This includes formatting restrictions that limit usefulness of existing fields or missing fields.

NFE is to ensure that any interrelated data layers are updated for any newly created data. For instance, if new wetlands are identified (Wetland_A) and suitability for listed branchiopods is determined during the survey, the corresponding data needs to be updated in the species layer as well (SpecialStatusSpecies_A). Even if suitability is not determined, the new wetland needs to be added to the species layer and noted as unknown suitability.

10.0 ADMINISTRATION

10.1 This cooperative agreement may be administered through a CESU only upon mutual agreement and official authorization by both parties of the acceptance of the application of the CESU Network IDC rate (17.5%).

10.2 Any resulting cooperative agreement shall be subject to, and recipient/Cooperator shall comply with 2 CFR 200.313 "Equipment", 200.314 "Supplies", and 200.315 "Intangible Property" which includes use of research data. NOTE: In addition to the General Terms and Conditions, the Recipient shall request disposition instructions from the Federal Awarding agency (USACE) PM, as applicable.

11.0 POST AWARD REQUIREMENTS and DOCUMENTATION

11.1 Invoicing and Progress Reports - Submit Payment Request and additional required documents to: swf-cesu-invoice@usace.army.mil. Carbon Copy the assigned

USACE Project Manager as well as your organization's POCs for the additional required documents as well as the delinquent accounts POC.

11.1.1 Frequency: Quarterly plus 30-day grace period. If the coverage dates are not quarterly or preapproved by the PM (or the first/last submittal), the payment request will be **rejected**.

Quarters	Invoice pkgs due No Later Than (NLT):
Q1: Oct-Dec	Q1: 31 Jan
Q2: Jan-Mar	Q2: 30 Apr
Q3: Apr-Jun	Q3: 30 Jul
Q4: Jul-Sep	Q4: 31 Oct

11.1.2 Payment Requests must be submitted on form SF270 with the accompanying SF-PPR progress report. SF270s will be **rejected** if the SF-PPR progress report has not been received.

Please ensure to include the following on the SF-PPR progress report:

- Separate details by CLIN
- Achievements
- Percent Completion
- Project Status
- Problems encountered and impact of activities and personnel on schedule.
- Anticipated work in next reporting period

If the SF-PPR is incomplete, it will be rejected causing the SF270 to also be rejected. SF-PPR Forms with above fields may be requested at: swf-cesu-invoice@usace.army.mil

The SF270 may have multiple pages. May request Excel version @ swf-cesu-invoice@usace.army.mil **Must be submitted in PDF or it will be rejected.**

SF270 Block 11 (a), (b), (c) are for the description of funds. Preferred description is: CLIN/PoP Type, PoP start and end dates, amount awarded. At minimum include the CLIN.

Example:

***CLIN 0001/ Base
22SEP23 – 21SEP24
\$100,000.00***

Funding must be separated as specified on the Award document. For Sub-CLINs that specify "*for funding only*", may be rolled into the primary CLIN unless otherwise instructed. All others require PM approval. If the description is missing; payment request will be **rejected**.

11.1.3 The **FINAL** invoice package must include the following documents. The entire Final invoice package is due no later than 90 days from the period of performance (POP) end date:

- Final SF270
- SF-PPR
- Final SF425
- DD882
- SF428 plus attachment B (C&S if applicable)
- SF298
- Final Report

Missing any of the above required documents, the Payment Request will be **rejected**.

Forms may be requested from the district office or found at: www.grants.gov

END OF STATEMENT OF OBJECTIVES